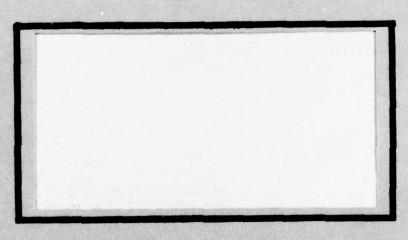
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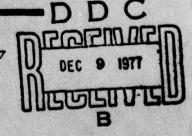


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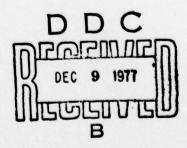
AN INVESTIGATION OF THE SCOPE, PURPOSE, AND EFFECTS OF UNITED STATES FOREIGN MILITARY SALES TO SAUDI ARABIA

Billy L. Dycus, Captain, USAF Joseph A. Fiorillo, Jr., Captain, USAF

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The United States Security Assistance Program has grown rapidly in the 1970s and Saudi Arabia has been an integral part of the growth. By 1976 Saudi Arabia became the largest purchaser of U.S. arms and equipment worldwide. The research analyzes the purposes and effects of U.S. foreign military sales to Saudi Arabia against a background which includes (1) the history of the U.S.-Saudi military supply relationship; (2) the economic, political, social, military and strategic environment of Saudi Arabia; and (3) the U.S. foreign military sales programs to Saudi Arabia. The background which is discussed in some depth provides essential information for analyzing U.S. FMS to Saudi Arabia. The analysis reveals that despite an intricate and comprehensive arms transfer criteria, the United States evaluates primarily two considerations in making arms transfers to Saudi Arabia -- the military balance of power in the Middle East region and the economic effects of arms transfers on the Saudi economy. The authors' net assessment is, that in light of these two criteria, arms transfers are justified and purposeful and exert a positive effect on Saudi Arabia.

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AN INVESTIGATION OF THE SCOPE, PURPOSE, AND EFFECTS OF UNITED STATES FOREIGN MILITARY SALES TO SAUDI ARABIA

A Thesis

Presented to the Faculty of the School of Systems and Logistics of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the Requirements for the Degree of Masters of Science in Logistics Management

By

Billy L. Dycus, BS Captain, USAF

Joseph A. Fiorillo, Jr., BBA Captain, USAF

September 1977

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and

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MASTER OF SCIENCE IN LOGISTICS MANAGEMENT

DATE: 7 September 1977

Stephen & Barnett
COMMITTEE CHAIRMAN

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CHAPTER I

INTRODUCTION

Problem Statement

For over a quarter of a century our military supply relationship has been one of the foundation stones which has fostered Saudi confidence in this country and receptivity of our international goals [36:8].

Since 1947, the United States (U.S.) has sold in excess of 11.9 billion dollars worth of arms and military equipment to Saudi Arabia. Approximately 9.7 billion dollars or 75 percent of the total sum has been sold since Fiscal Year (FY) 1970. United States foreign military sales (FMS) to Saudi Arabia in FY 1976 amounted to over 2.5 billion dollars, more than the United States Department of Defense world-wide sales for FY 1971 and the largest amount sold to any single country in FY 1976. Projections for Saudi Arabian purchases through FY 1980 are 3 billion dollars per year (13:5-9).

Studies indicate that information on U.S. foreign military sales to Saudi Arabia is fragmented and not accompanied by any meaningful background data. Because of the magnitude of foreign military sales to Saudi Arabia and the outlook for the future, there is a need for a single source document to consolidate U.S. foreign military sales to Saudi Arabia.

Justification

are is a great amount of both qualitative

and cive information about U.S. foreign military

sales to saudi Arabia. The available material is complex,

fragmented, and difficult to find and interpret. Unless

military advisors have been involved with the evolution of

foreign military sales and are thoroughly familiar with the

current sales transactions, they could spend a considerable

amount of time searching for information on the background

of past, present, and future FMS to Saudi Arabia (31:12-20).

Saudi Arabia receives a large and ever-growing portion of U.S. foreign military sales. Accompanying these sales are an ever-increasing number of personnel. The time spent in familiarizing new personnel with the broad perspective of foreign military sales and a working knowledge of a particular security assistance program reduces the time available for managing and supporting specific sales (31:12-20).

The lack of a single source document often results in a waste of valuable human resources. Interviews conducted with personnel from the Department of State/Middle East Affairs (6), U.S. Air Force Logistics Command/Directorate of International Logistics (9), and Air Force Acquisition Logistics Division/Directorate of Military Sales to Saudi Arabia (27), highlighted a growing need for a single unclassified document describing and assessing the

magnitude of U.S. foreign military sales to Saudi Arabia. Directorates in the process of expanding and reorganizing to meet the growing number of sales might independently perform parallel studies of individual sales or issue conflicting directives based on inadequate information. Such duplication of effort wastes human resources otherwise available for sales management and support.

In addition, the Air Force Institute of Technology (AFIT) requires a single source of information on foreign military sales to Saudi Arabia. Discussions with Dr. Leslie N. Norton, Professor of Logistics Management, School of Systems and Logistics, AFIT, revealed the need for an unclassified document for classroom use by the Defense Institute of Security Assistance Management (DISAM). A single source of information is also required to provide an orientation for the broad spectrum of logistics managers and to provide a basis for further study and research by future AFIT students in International Logistics (23).

The synthesizing of available information concerning foreign military sales to Saudi Arabia, through 1976, into a concise document will assist in reducing both training time and duplication of effort. It will also help to fill the gap confronted by academicians and logisticians when investigating foreign military sales to Saudi Arabia.

Definition of Terms

Arms Transfers—defense articles and services such as arms, ammunition, implements of war, and the training, technical assistance, and related technical data, provided by the U.S. government under the Foreign Assistance Act of 1961 (45:4).

Cash Sales (Department of Defense) -- payments, for defense articles and services; due within a reasonable period of time not to exceed 120 days after delivery of the items, cash in advance, dependable undertaking-terms of sales, and dependable undertaking-120 days payment (45:4).

Defense Articles—articles of military hardware provided by the U.S. to a purchasing country within the provision of the Foreign Military Sales Act of 1968, but does not include merchant vessels, major combat vessels, atomic or nuclear weapons or materials, or any other restricted material or data of any kind (45:4).

<u>Defense Services</u>—any service, test, inspection, repair, training, publication, and technical assistance provided to a purchasing country under the provisions of the Foreign Military Sales Act of 1968 (45:5).

Foreign Military Sales--the sale of Defense

Articles and Services to eligible, friendly nations on a

cash or credit basis. All sales are made in accordance

with the 1968 Foreign Military Sales Act. Foreign Military

Sales include: cash sales from stocks of the Department of

Defense (DOD); procurement for cash sales by the DOD; DOD credit sales; and DOD guarantees covering private financing of defense articles and services (12:2-3; 47:1-3).

1

Military Export Sales—all sales of defense articles and defense services made from U.S. sources to foreign governments, foreign private firms and international organizations by either DOD or U.S. private industry. There are two major categories of Military Export Sales: Foreign Military Sales, and Commercial Sales (45:6).

Security Assistance—all DOD activities carried out under the authority of the Foreign Military Sales Act of 1968 or the Foreign Assistance Acts of 1961 and 1974 or related appropriations acts and statutory authorities (45:6).

Scope and Limitations

This study is limited to assimilating information on foreign military sales to Saudi Arabia since 1947. The main emphasis is on foreign military sales transacted since 1970; however, military assistance, to include credits and grants, is explained to a limited degree.

The study is not concerned with all aspects of U.S.-Saudi relations especially those in the field of politics. However, U.S. policy towards arms sales is presented and judgmental evaluations of the policy are made with respect to Saudi Arabia.

Objectives

The research is aimed at the following objectives:

- To synthesize into a single, concise document the evolution of foreign military sales to Saudi Arabia through 1976.
- 2. To identify the purpose and effect of U.S. foreign military sales to Saudi Arabia.

Research Approach and Presentation Historical Synthesis

Most of the information available on U.S. FMS to Saudi Arabia is either contained in government documents or is of a contemporary news nature. A number of books have been published which related broadly to FMS but none of those reviewed specifically addressed U.S. foreign military sales to Saudi Arabia. Fragmented coverage concerning FMS to Saudi Arabia can be found in numerous newspaper articles which by their nature provide only a superficial discussion of the subject as it applies to Saudi Arabia. Various aspects of FMS to Saudi Arabia have been, and are being studied, by student theses in AFIT and research papers from other military educational institutions. However, none of these specifically cover the purpose for and the effects of U.S. FMS to Saudi Arabia.

Data Sources

The data on U.S. FMS to Saudi Arabia best lends itself to a research question analysis. Considerable qualitative information is available on FMS to Saudi Arabia. The dynamic nature of FMS and its use as an instrument of U.S. foreign policy introduces an unlimited number of variables that present an excellent source of data for a research question analysis.

Principal documents used to research military sales were the Congressional Record and the Congressional Quarterly Almanac, publications which gave a comprehensive summary of all military sales. These sources provided the basis for the information presented in Chapters V and VI. The principle sources of information presented in Chapter III was obtained from numerous periodicals, newspapers, professional journals, digests, theses and other publications. These sources also served to supplement the information in Chapters V and VI.

Unstructured interviews were conducted with personnel in the Department of State/Middle East Affairs (4), United States Air Force Logistics Command/Directorate of International Logistics (6) and Air Force acquisition Division/Directorate of Military Sales to Saudi Arabia (27). The opinions obtained indicated a need for one, up-to-date, unclassified report on the extent of U.S. foreign military sales to Saudi Arabia. The interviews also provided

technical expertise and insight into the area of FMS, and assistance in the proper interpretation of information contained in computerized records and military regulations and manuals.

Thesis Format

Chapter II gives an overview of U.S. FMS and a perspective of U.S. FMS to Saudi Arabia.

Chapter III gives a background of Saudi Arabia; the culture, natural resources, geography, economy and foreign relations. It is designed to place later discussions of U.S. FMS into proper perspective.

Chapter IV summarizes the evolution of the Saudi Arabian military establishment and presents the Saudi Arabian Armed Forces structure to include the Army, Air Force, Navy, and National Guard.

Chapter V contains a summary of U.S. FMS to Saudi Arabia. This chapter encompasses numerical and graphical presentation of known U.S. FMS and a description of current U.S. FMS programs to Saudi Arabia.

Chapter VI assesses the purposes and effects of U.S. FMS to Saudi Arabia. This chapter contains the core of the research effort. The fundamental purposes of U.S. FMS to Saudi Arabia are presented and selected pertinent considerations are discussed. Additionally, divergent opinions of various elected leaders, scholars, and military experts are contrasted.

Chapter VII contains the conclusions. The scope, purpose and effects of U.S. FMS to Saudi Arabia are summarized and a net assessment is made.

CHAPTER II

OVERVIEW OF FOREIGN MILITARY SALES

Evolution of U.S. Foreign Military Sales

Military Assistance has been an instrument of U.S. foreign policy since World War II. Although some transfers of defense materials occurred during World War I, and in the 1930s, U.S. military assistance did not begin until the adoption of the Lend Lease Act of 1941 (48:1-2). Lend Lease established a precedent whereby the President gained Congressional approval to:

. . . authorize the manufacture of defense articles . . . for any foreign government whose defense he deemed vital to the defense of the United States and to sell, transfer title to, exchange, lease, lend, or otherwise dispose of, to any government any defense articles [36:14].

Following World War II, military assistance took on increased significance in the form of grant aid. The Truman Doctrine and the Economic Cooperation Act of 1948 (Marshall Plan) were based on the premise that security and economic well-being of friendly countries is essential to U.S. security and laid the foundation for revival of a European self-defense effort. Specific grant aid included: machinery and materials to permit Europe to increase its own production of military items; direct transfer of military

equipment; and, expert help in the production and use of military equipment and training of personnel (48:B2-3).

The basic authority and foundation of U.S. military assistance began with enactment of the Mutual Defense Act of 1949 and the Mutual Security Act of 1951. These acts enabled the United States, for the first time, to implement a coordinated and efficient foreign aid program (55:12).

Foreign military sales as a distinct entity of military assistance and U.S. foreign policy began to emerge in 1954. The Mutual Security Act of 1954, recognizing the relationship of FMS to U.S. policy, established the International Cooperation Agency (ICA) within the Department of State. ICA was given the responsibility to control export licenses for arms, ammunitions and implements of war (48:5).

Foreign Military Sales continued to evolve as an instrument of U.S. policy during the late 1950s and through the 1960s. The Mutual Security Act of 1957 (55:11-12) and the Foreign Assistance Act of 1961 (48:5) reflected the growing importance of FMS. The Mutual Security Act of 1957 authorized, for the first time, DOD participation in credit financing by authorizing the formation of a 15 million dollar fund for use in arranging credit for arms sales (55: 13-15). The Foreign Assistance Act of 1961, a major legislative milestone, broadened the authority which previously existed for the U.S. to enter into sales and agreements and authorized the President to sell defense services or

articles from DOD stocks to any friendly country or international organization provided the recipient agreed to pay in U.S. dollars (48:5). Throughout the 1960s foreign assistance legislation encouraged a transition from grant aid to military sales through relaxation of terms of payment and the establishment of a revolving fund by which DOD could guarantee the financing of credit sales (55:13-15).

The Foreign Military Sales Act of 1968 (13:3) institutionalized foreign military sales as an instrument of U.S. foreign policy. By 1968, military sales were some three times greater in volume than the grant aid program and ". . . concern was being expressed by Congress over the need for restraint in military exports [55:33-39]." The general area of Congressional concern at this time was that arms sales might further regional arms races and cause poorer nations to divert resources from badly needed economic development to arms development. The Foreign Military Sales Act of 1968 consolidated and revised provisions of the Foreign Assistance Act of 1961 on reimburseable military sales by the U.S. Government. This consolidation provided both the legislative authority and the administrative mechanism to meet the growing demands of the FMS program. The Act also authorized the U.S.

^{...} to sell defense articles and services to friendly countries that are able to pay to equip their military forces without undue burden to their economies in furthering the security objectives of the United States and consistent with the objectives of the United Nations [55:18-21].

Foreign military sales continued to expand in the early 1970s and Congressional concern on the arms transfers were dramatized in the Foreign Assistance Act of 1974 (25:524).

It is the sense of Congress that the recent growth in international transfers of conventional arms to developing nations; (1) is a cause for grave concern for other nations in that in particular areas of the world it increases the danger of potential violence among nations and diverts scarce resources from more peaceful uses; and (2) could be controlled progressively through recipient nations [13:4].

The Arms Export Control Act of 1976 (42:1-14) is the most recent legislation emphasizing Congressional concern about FMS. Designed to clamp down on "runaway arms sales," it shifted U.S. policy from expanding exports of U.S. arms and military equipment to strengthening Congressional controls on exportation.

It shall be the policy of the United States to exert leadership in the world community to bring about arrangements for reducing the international trade in the implements of war and to lessen the dangers of outbreak of regional conflict and the burdens of armaments. U.S. programs for or procedures governing the export, sale and grant of defense articles and defense services to foreign countries shall be administered in a manner which will carry out this policy [42:2].

U.S. Foreign Military Sales to Saudi Arabia: Perspective

The U.S. has been involved with foreign military sales and security assistance programs to Saudi Arabia since the 1947 Dhahran Agreement, which provided U.S. military training for Saudi nationals in exchange for facilities

at Dhahran Air Base. Throughout the 1950s and 1960s, the U.S. military supply and training programs were relatively low-level and concentrated on the improving of traditional small-scale military units. Virtually no modern weapons were involved in the updating of the age-old cavalry and ground tactics of Saudi Arabia's military forces (51:5).

During the period of the 1950s and 1960s, the prevailing U.S. FMS policy towards Saudi Arabia was not only clear and consistent, but very restrictive. Notable in its insensitivity to the impact of arms sales on the Arab-Israeli conflict, the U.S. FMS policy towards Saudi Arabia consisted of four basic purposes. First, the U.S. policy represented a general resistance on the part of the U.S. to sell weapons (especially high performance) to countries not directly threatened by a Soviet or Chinese military attack and not involved in externally sponsored insurgencies. Second, the U.S. policy represented an overall U.S. reluctance to transfer weapons to underdeveloped nations recognizing a variety of concerns which covered the spectrum from an awareness of the impact of well armed military forces on domestic stability to altruistic concerns over the effects of militarization upon economic development. Third, the U.S. policy represented a particular U.S. reticence to sell arms in the Middle East; recognizing the ever-present possibility of a dynamic arms race and the multifaceted nature of the regions arms

competition (Arab/Arab; Israel/Arab; Arab/Iranian).

Fourth, the U.S. policy acknowledged the sphere of activity demarcation between the United States and Britain. The Persian Gulf and Arabia were regarded as primarily British spheres of responsibility (39:708-715).

As a result of the four basic U.S. FMS purposes, well-founded Saudi arms requests were for the most part transferred to the British who at that time were actively involved in the affairs of Saudi Arabia and the Middle East. The British acceptance of and response to Saudi arms requests were highlighted by the British involvement in the sale of British Lightnings during the peak of Saudi Arabian and Egyptian hostilities over the war in Yemen in 1965-67.

Throughout the entire period, Saudi Arabia, still very much a client state, accepted the U.S. FMS policy with little resistance or resentment. Indeed, the Saudi regime was not interested in large quantities of sophisticated arms. The Saudis sought only to minimize the flow of arms, viewed as a potentially disruptive element, to effect an easy balance between the largely primitive Saudi Arabian National Guard or "white army" and the Saudi regular armed forces. As a result, the Saudis were very lightly armed by the end of the 1960s. In fact, the full inventory of Saudi weaponry would not have sufficiently equipped one armored brigade. Saudi ground forces had only

twenty-five old U.S.-built M-47 medium tanks and sixty M41 light tanks and the Saudi Air Force had only fifteen U.S.-built jets and these were the very old F-86s (39: 707-715).

In 1969 the U.S. FMS policy to Saudi Arabia changed. Reflecting a reluctance by Congress and the American public to actively use force in deterring conflict outside of core alliance areas, the U.S. policy increasingly emphasized military self-reliance on the part of third world countries through a liberalized policy on U.S. FMS and arms transfers. The U.S. policy was enunciated in the Nixon Doctrine and stated in part that:

We shall furnish military and economic assistance when requested and as appropriate. But we shall look to the nation directly threatened to assume the primary responsibility of providing the manpower for its defense [13:2].

Pursuant to the Nixon proclamation, Saudi Arabia began an ambitious program to modernize the existing arms of their military structure. Total military purchases increased tenfold from 4.2 million dollars in FY 1969 to 44.9 million dollars in FY 1970 (46:15).

To add impetus to the change in FMS policies, the U.S. downgraded three important inhibitions on the transfer of arms to Saudi Arabia and third world countries in general. First, the U.S. placed reduced emphasis on client control, a concept which prohibited the U.S. from supplying equipment which might encourage adventurism by a

client country. Second, the U.S. placed reduced emphasis on arms control, a concept in which the U.S. had favored alliance strength to transfers which might encourage regional arms races. Third, the U.S. placed reduced emphasis on the security of U.S. military technology, a concept which had prevented the sale of U.S. arms which incorporated principles or techniques which the Soviet Union could acquire from country inventories (39:708-715).

As a result of the renewed emphasis of FMS by the U.S., Saudi Arabian defense purchases doubled from 337 million dollars in FY 1972 to 625 million dollars in FY 1973. In FY 1974 the U.S. sold over 8.26 billion dollars worth of weapons to over 70 different countries (13:6-7). Saudi Arabia ranked third on the list with 2.59 billion dollars of purchases. In FY 1976, Saudi Arabia was the leading buyer with in excess of 2.53 billion dollars of FMS purchases.

In effect, then, what had caused the rapid increase in Saudi military purchases was that the liberalization of U.S. FMS policy in the early 1970s directly coincided with a revised Saudi national policy which emphasized a large and modern military establishment inclusive of high performance weapons in all branches of the Saudi armed forces. Virtually unconstrained financially as a result of tremendous oil revenues, Saudi arms purchases increased at an exponential rate since CY 1973.

By 1976, Saudi arms purchases were perceived to be prudent and realistic; maintaining both a balance between the acquisition of weapons and the building of infrastructure and a balance between the development of a manpower base and the formation of a force structure (39:708-715).

CHAPTER III

BACKGROUND OF SAUDI ARABIA

People and Country

The Kingdom of Saudi Arabia (al-Mamlaka al-'Arabyya al-Saudiyya) occupies about four fifths of the Arabian peninsula, which is located in Southwestern Asia. It is bounded by Jordan, Iraq, and Kuwait on the north; the Arabian Gulf, Qatar, the Trucial States, Muscat and Oman, South Yemen and Yemen on the east; and the Red Sea and the Gulf of Aquaba on the west. Although official estimates on the size of the country are between 830-865,000 square miles, few of the land boundaries have been determined because of several disputed border lines (20:9; 50:4).

Geographically, Saudi Arabia is a unified plateau, consisting mostly of sand desert with lava beds in the west central portion and crossed by two mountain ranges, the highest peak of which is 12,000 feet. There are no permanent rivers or bodies of water and, as a result, only seasonal riverbeds and springs provide water for oasis agriculture. The climate is extremely hot with little rain except for Asir, the region along the southeast coast of the Red Sea. The Asir receives more rainfall than any other part of the country, an average of twelve inches compared with two to four elsewhere, and is a unique contrast to

the rest of Saudi Arabia with green forests and terraced farms (20:9; 53:XLI).

The Kingdom of Saudi Arabia is divided into four administrative regions: the Eastern Privince (al-Hasa), the Central Province (Najd), the Western Province (Hijaz) and the Southwestern Province ('Asir) (see Figure 1). The Eastern province has assumed importance due primarily to the large concentrations of oil. The Central province has assumed importance as the capital of the House of Saud and the center of the Wahhabite sect of Islam; while, the Western province contains Muslim holy places and has been important in that respect (22:6).

The people of Saudi Arabia are basically semitic of the eastern Mediterranean strain with African admixtures. However, they are all identified as Arabs. Ninety-nine percent of the people are muslims. The Saudi Arabs are predominantly Sunni Muslims who mostly adhere to the Wahhabism (puritanical interpretation of Islam). There are no native Christians in Saudi Arabia although many Americans, Europeans and Christians of other countries reside in the country in support of the oil industry. Jews are barred from Saudi Arabia and non-Muslims are prohibited from entering the holy cities of Mecca and Medina (1:2-3).

Because most of the country consists of wasteland the settled population is concentrated in a few major cities and in three belts running southeast to northwest.



Fig. 1. Saudi Arabia

Source: U.S. Department of State. <u>Background Notes</u>, <u>Saudi Arabia</u>. October 1975. Nyrop, Richard F., and others. <u>Area Handbook for Saudi Arabia</u>. 3rd ed. Washington: <u>Government Printing Office</u>, 1977. DA PAM 550-51.

In the west the population is concentrated on the coastal plain from north of Medina to about Taif. The second concentration is located in the Nejd beginning just north of Barayda and stretches south past Al-kharj. The third area is located along the Persian Gulf Coast from Ras Tanura south and west to the Haradh agricultural settlement. Accompanying these major population concentrations are small areas of permanent settlements scattered throughout Saudi Arabia (16:12-13).

Although the results of a recent census have not been released, the estimated population of Saudi Arabia is less than six million. Of that number roughly one million are estimated to be non-Saudi workers filling increased demand for skilled technicians. An estimated 50 percent of the population are Bedouin tribesman, 25 percent are urban dwellers and the remaining 25 percent are settled cultivators. The population distribution is approximately one third employed in agriculture, one third employed in public service and one fourth employed in trade, finance, transport and services (27:6; 53:XLI).

In recent years, owing primarily to the tremendous oil wealth, a tendency toward class distinction has developed into an official line of class. The royal family, the house of Saud is the highest class followed by lesser princely families, tribal sheiks and successful merchant families. A new middle class, although still numerically

small, is now emerging in Saudi Arabia which includes educators, scientists, managers and other white collar workers. The lower class is made up of nomadic Bedouin, seminomadic herdsmen and blue collar workers in both the government and private sector. The lowest level of society are the former slaves who are used extensively as infantry in the army (1:2-3; 14:37-39).

Political Overview

Semitic speaking people have inhabited the Arabian peninsula since the dawn of recorded history, approximately 3,000 years ago. The earliest known were the Minnaen and Sabbean civilizations which existed in the mountains of Yemen more than seven centuries before the Christian era. However, the development of Saudi Arabia, as it is known today, did not begin until 1742 when Emir Mohammed Ibn Saud, the founder of the present ruling dynasty, gave refuge to Mohammed Ibn Abd al-Wahhab (1703-1792) and embraced the puritanical Wahhabite version of Islam (53:25).

For the next 200 years, Mohammed Ibn Saud and his descendants, using the fanatical Bedouin support of the Wahhabi religious movement for a political base, began to spread their hegemony and the Wahhabite doctrine throughout the Arabian peninsula. In 1932 the Kingdom of Saudi Arabia was created by Abd al-Aziz Ibn Saud as a result of his

¹ Slavery was legal in Saudi Arabia until 1963.

conquests of the tribes of the Nejd, Al-Hasa, the Asir and the defeat of the Hashemite King of the Hejaz (53:25-46).

Since the establishment of the kingdom in 1932 the political structure of Saudi Arabia has changed from a primitive tribal religious patriarchy into a conservative Muslim monarchy ruled by King Khalid-al-Saud whose authority is derived from a large closely knit royal family, allegiances of powerful tribal chiefs and an influential group of religious scholars who profess the country's Islamic tradition (53:25-46).

As a monarchy, Saudi Arabia has no written constitution; instead, the nation's legislation is based on the religious laws of Islam known as the Shariah. The Shariah has provided the country with civil and penal codes which have resolved the religious problems. The Shariah is based on the Koran (which is the central core of Mohammedism) and is supported by the Sunnah (a document which contains the practices and exemplary life led by the prophet Mohammed) and the Hadith (traditions and customs that can be traced back to the prophet Mohammed or a companion (1:3-6; 16:29-34; 22:29-32; 24:113-129).

Supplementary support for the authority of the Saudi Arabian monarchy is founded in four documents: The Constitution of the Hejaz (1926); 2 the Decree of

²There is some disagreement among the sources concerning the applicability of the 1926 Constitution of the Hejaz as part of the basic constitutional framework;

January 29, 1927, uniting Hejaz and Nejd and constituting the Hejaz a Kingdom; the Decree of September 18, 1932, announcing the establishment of the Kingdom of Saudi Arabia; and Decree 38, Regulations of the Council of Ministers, May 11, 1958 (16:29-34).

The political system of Saudi Arabia is characterized by a high degree of stability. This stability has been a result of consciously balanced and carefully supported tribal traditions, religious influences, family power and oil wealth, and has formed the core of traditional political dynamics in Saudi Arabia. However, several factors have begun to disturb this equilibrium in recent years. These factors include the new wealth inspired by oil, the growing number of educated Saudis, the movement of the population towards urban centers, the growing number of middle class workers, the rapidly arming national guard with its elite officer class, and the wealthy, foreign educated royal princes. These factors represent potential challenges to Saudi Arabia's political traditionalism through the following dichotomies: traditionalism versus modernity, tribalism versus urbanism, Islamic-Wahhabite social rigidity versus secular mobility, family autocracy versus participatory government and customary tribal rules versus written constitutional law. Resolution or

those who feel it doesn't apply include instead the Decree of December 29, 1931, establishing the Council of Ministers.

reconciliation of these dichotomies represent the major focus for continued political stability within Saudi Arabia in future years (22:29-34; 44:43-93).

Economic Overview

Saudi Arabia has traditionally been an agricultural and pastoral country with a simple, tribal economy. Until the discovery of oil, Arabia's economy had been based on the oasis, village and tribe--each functioning almost independently (1:7). Water is the most precious natural resource of the kingdom and the main constraint on the nation's development (16:7). Less than one percent of the land is suitable for cultivation and as a result Saudi Arabia has lacked the capacity to produce enough agricultural products to meet the total requirements of the country. Despite the fact that other natural resources such as gold, silver, copper, sulphur, and rare earths have been found in commercial quantities, the economy of Saudi Arabia is dominated by one resource--oil (16:8; 22:9).

Saudi Arabian Oil Industry

Historically, oil concessions date back to 1923 when Major Frank Homes, a representative of a group of British investors, secured a concession for oil exportation in the Eastern province of Saudi Arabia. However, the agreement was cancelled in 1928, when the British investors failed to exercise the rights of the concession. In 1932,

King Abd-al-Aziz Ibn Saud, encouraged by the discovery of oil in the neighboring country of Bahrain, granted a second concession for the exploration of oil to Standard Oil of California (SOCAL). The agreement was signed on 29 May 1933. It granted SOCAL

. . . the exclusive right for a period of 60 years (from 1933 to 1999) to explore, prospect, drill for, extract, treat, manufacture, transport, deal with, carry away and export oil products, and to create the facilities to carry out these activities [16:159].

SOCAL was granted an exclusive area of over 400,000 square miles covering almost all of Eastern Saudi Arabia. In 1938, after three years of drilling operation, oil in commercial quantities was discovered at Damman; however, World War II kept production at a relatively low level (16:156-211).

In 1944, SOCAL incorporated with Texaco, Exxon and Mobil, and changed its name to Arabian-American Oil Company (Aramco). In 1945 a refinery at Ras Tanura was completed and production began on a large scale with over 50,000 barrels a day. By 1951, with the enlargement of the refinery at Ras Tanura, production had increased to in excess of half a million barrels a day. By 1974 Saudi Arabia's daily production of crude oil was approximately 8.5 million barrels (see Table 1) (16:194; 20:25).

The total Arab world's proven oil reserves of 361.335 billion barrels constitute over 55 percent of the total reserves of the non-Communist countries. Saudi Arabia, by itself, has reserves of 164.5 billion barrels

TABLE 1
CRUDE OIL PRODUCTION

Year	Millions of Barrels Daily	Total Barrels in Billions	
1974	8,500.0	3,102.5	
1973	7,334.6	2,667.1	
1972	5,733.4	2,098.4	
1971	4,497.5	1,641.6	
1970	3,548.8	1,295.3	
1969	2,992.6	1,092.3	

Source: Saudi Arabia; A New Economic Survey, by First National City Bank, 1974, p. 11.

or 27 percent of the reserve of the non-Communist world (16:191-211; 20:5).

Impact of Oil on Saudi Economy

Before the discovery of oil, Saudi Arabia's economy had been very limited and was based primarily on revenues from pilgrimmage traffic, oases and agriculture. Traditional characteristics of the Saudi economy were poverty, illiteracy, disease and primitive techniques (1:14). Since the discovery of oil, oil has become the dominant feature of the economy. Oil revenues account for almost 95 percent of Saudi Arabia's total national revenues and have provided the vast majority of Saudi national income and provides the highest wages of all jobs (1:14; 21:9-17).

Oil revenues have impelled the current transition from a traditional tribal feudal economy into a modern industrial state. Since 1973 oil revenues have doubled

from \$2.7 billion to over \$5.5 billion and in 1974 quadrupled to \$19.4 billion. It is estimated that by 1980 Saudi Arabia's revenues from oil will be between 26.5 and 50.5 billion dollars (22:5-28). Although oil revenues have substantially eliminated Saudi Arabia's financial situation and have enabled the country to acquire many technological innovations, there have been some negative aspects.

The sudden influx of wealth particularly to the royal family has produced corruption, nepotism and gross financial irresponsibility. Large proportions of oil revenues were wastefully dissipated on modern amenities while little had been done to better the lives of the people. A former oil minister of Saudi Arabia stated on the misappropriation of oil revenues:

Before the advent of oil, Arabia lived frugally, but everyone was content, now the poor man is poorer.
. . . A small minority live in palaces equipped with the latest gimmicks but the masses have no roof to protect them. . . [1:15].

The concentration of wealth to the Saudi Arabian elite has created a country of striking contrasts with few wealthy and masses of very poor. Indeed, Saudi Arabia is considered by many scholars to be far behind other Middle Eastern countries in economic development (1:15,32).

³Prior to the discovery of oil and with the collapse of the trade routes due to the worldwide depression in the early 1930s, Saudi Arabia was on the verge of financial collapse.

Although oil revenues have resulted in reduced taxes on the population and increased imports of economic necessities, particularly foodstuffs and industry, oil revenues have caused the virtual collapse of local crafts in the domestic market. This has imposed hardships on the countryside and thrown the rural areas into great dependence on supplies of imported goods from urban centers. In turn, Saudi nomads have migrated towards the urban centers, urban centers that have been created almost solely for the support of the oil industry. As a result, almost the entire Saudi economy has become centered around the oil enterprises (21:55).

The vast oil revenues have allowed for virtually unrestrained foreign exchange in endeavors to promote economic development but the Saudis have shown a diminished capacity to effectively utilize their foreign exchange reserves. The abundance of wealth, although useful in the development of the Saudi infrastructure, notably schools, airports, hospitals, seaports and refineries, has created an atmosphere characterized by extravagant consumption, vanity, heavy dependence on imported luxury goods, and little concern for administrative efficiency. As a result, a "manual labor is beneath me" attitude has been reflected by the few wealthy while a contrasting "let the government do it" attitude has been exhibited by the large poor and middle class (1:14-22; 16; 24:219-275).

Lastly, the presence of oil has created the opening through which American culture and American attitudes and technology have penetrated the kingdom. The prevailing attitudes of the Saudis toward foreigners particularly non-Moslem foreigners (borne of their religious belief) had traditionally been non-secular. The emergence of oil has created trends toward secularization and, as a consequence, there has developed an ever-widening gap between the old economic patterns and the new economic activities created by the oil activities (1:14-22).

The Five-Year Economic Development Plan of 1970-1975

In 1970, Saudi Arabia implemented a five-year economic development plan. Essentially, a formalization of economic policy that had existed since the mid 1960s, the objectives of the plan were to maintain Saudi

. . . religious and moral values and to raise the living standards and welfare of the Saudi people, while providing for national security and maintaining economic and social stability [22:20-21].

The goal was a growth rate of 10 percent per year through the end of 1976 with spending concentrated on education, public health, essential infrastructure, agriculture and water resources and some oil related investment projects of Petromin, the state petroleum company (16:5-28; 22:22-26).

The plan was characterized by spiraling revenues which increased approximately 1500 percent, spiraling

appropriations in an attempt to equal estimated revenues and a decreasing ratio of actual expenditures in regards to appropriations (see Table 2).

It is important to note that foreign assistance was omitted from the data on actual expenditures in Table 2 although bilateral aid consisted of over \$2 billion in 1974. Following the Arab-Israeli War in 1967 Saudi Arabia agreed to supply almost \$200 million yearly in foreign aid to Syria, Jordan and Egypt combined. With the four-fold increase in revenues in 1974 new commitments of aid were made by Saudi Arabia to include a \$100 million grant to Egypt in April 1974 and another \$300 million grant in August 1974 as part of a total \$1.5 billion commitment. Saudi Arabian aid has also been extended to a wide range of other countries to include Niger, Somalia, Sudan, Uganda, The Peoples Democratic Republic of Yemen, Bahrain, Mauritania, Morocco, Tunisia and Liberia (16:5-28).

From Table 3, the growth and appropriations for national security within the first five-year economic development plan is evident. Defense expenditures which had averaged 10 percent of the total expenditures in the late 1960s and early 1970s reached 21.6 percent of the total expenditures in 1975.

Although the first five-year economic development program encompassed all aspects of the Saudi economy (see Table 4) defense appropriations were by far the largest

TABLE 2

GOVERNMENT REVENUES, APPROPRIATIONS
AND EXPENDITURES 1971-1976

(billions of Saudi riyals)^a

Item	1971	1972	1973	1974	1975	1976
Estimated Revenues	6.4	10.8	13.2	22.8	98.2	95.8
Actual Revenues	7.9	11.1	15.4	41.3	101.4 ^b	n.a.
Appropriations	6.4	10.8	13.2	22.2	45.7	110.9
Actual Expenditures ^C	5.8	7.3	9.2	16.5	30.3 ^b	n.a.

Appropriations, expenditures and revenues are presented in riyals because these are the figures used as a basis for budget decisions in Saudi Arabia. The increase in terms of dollars would be greater because the riyal has appreciated in value 23 percent during this period from 4.5 riyals to the dollar in 1971 to 3.47 riyals to the dollar in 1975.

Source: Central Planning Organization, Development Plan, 1975-1980, and Saudi Arabian Monetary Agency [SAMA] Annual Report 1975 (Riyadh), pp. 11-15.

b_{Estimate}.

CExcludes aid to other Arab countries.

TABLE 3

ANALYSIS OF GOVERNMENT APPROPRIATIONS (1975)

Item	Percent
Defense	21.6
Transportation and Communications	13.1
Administration	12.7
Utilities and Urban Development	11.4
Education, Vocational Training and Cultural Affairs	9.1
Health and Social Affairs	4.6
Agriculture	1.3
Trade, Industry and Services	.9
Special Funds, Grants, Subsidies and Aid Programs	25.3

Source: Central Planning Organization, Development Plan 1975-1980, p. 37.

TABLE 4

HIGHLIGHTS OF FIVE-YEAR DEVELOPMENT PROGRAM 1970-1975

- There has been an extensive water exploration and water supply program. Seven desalination plants were put into operation.
- 2. Agricultural production grew slowly.
- Petroleum production and prices were increased substantially.
- 4. Major exploration and mapping programs were initiated for development of mineral resources.
- Electrical capacity expanded and electrical rates reduced.
- 6. Expansion of manufacturing not based on hydrocarbons overfulfilled targets but manufacturing activities related to petroleum fell short of targets.
- 7. Construction activity doubled over the five-year period.
- 8. Education and health services grew rapidly.
- 9. Social welfare programs strengthened considerably.
- 10. Housing construction has lagged behind demand.
- Valuable administrative experience has been achieved by government agencies and ministries.

Source: Wells, Donald A. Saudi Arabian Development Strategy. Washington: American Enterprise Institute, 1976, pp. 31-32. and had increased, in comparison to other major areas of appropriations, the greatest percentage. Donald A. Wells in Saudi Arabian Development Strategy highlights the spiraling Saudi Arabian defense appropriations as follows:

The ill defined limited nature of national security makes it difficult to establish limits to expenditures for defense when revenues increase considerably and some remain unspent. There is evidence that unspent development allocations in the past have been spent for national defense [54:5].

The Five-Year Economic Development Plan of 1975-1980

The second five-year economic development program implemented by King Khalid Ibn 'Abd al-'Aziz al Saud in April 1975, focused on three major elements of development strategy; economic diversification, manpower programs and economic growth distribution (6:28; 24:238-244; 54:17).

First the plan placed strong emphasis on diversification of economic activity through an increase in agricultural and industrial production. This diversification was advocated as a means of reducing dependence on the production and export of crude oil in the event of depletion of oil reserves. Further, the plan anticipated as a result of the economic redistribution, an annual growth in gross domestic product of 10.2 percent with education, public health and defense projected to average 15 percent.

Second, the plan proposed numerous manpower programs aimed at increased labor productivity. Adequately

trained manpower is considered essential to achieve the goals of the Saudi economic development plan.

Third, the plan proposed a method for distributing the growth in economic activity among five regions. Industrial bases are to be centered in the eastern and western regions along the coasts of the kingdom. An administrative center with light industry will be developed around Riyadh and an agricultural and administrative development will be increased in northern and southwestern regions. In addition, the established programs in transportation, communications, municipalities and housing are projected not only to continue but to accelerate (42).

The second plan estimated total expenditures to be \$143.6 billion with physical infrastructure ranking first at \$32.5 billion, economic resource development second at \$26.6 billion, human resource development at \$23.1 billion and defense at \$22.5 billion. However, it was only assumed that defense spending would increase at 20 percent a year. There is no support or justification for the projected rate of increase and the appearances have been that projected increases of defense expenditures are lower than what actual increases will be. Additionally, due to the non-recurrent nature of purchases of military hardware, the estimation of total military expenditures and the rate of increase in defense spending for the next five years will be difficult. Indeed, the existence of the second

five-year development plan should not alter the priorities of the Minister of Defense in any significant way (54:12-42).

Problems in Saudi Economic Development

The impact of both the first and second five-year development plans have, by and large, been positive, providing opportunities and benefits to the Saudi people which may have been otherwise foresaken. However, in assessing future economic prospects for Saudi Arabia, there are three major potential problem areas; manpower resources, administrative and physical infrastructure including communications and transportation; and noneconomically productive expenditures such as military purchases (18:125-131; 24:238-244).

The shortage of manpower is the most critical bottleneck to Saudi Arabian economic development. Although Saudi Arabia has the ability to finance large programs, it is severely constrained by a small population base. It is estimated that of the total population of Saudi Arabia, approximately 5.6 million people, only 48 percent of the men worked while less than one percent of the female population was employed. The principle reasons for such low ratios were lack of skilled manpower and the traditional Islamic social mores prohibiting women to work. In addition, educational levels among Saudis are quite low with an estimated 10 percent of the labor force having completed

primary education. Functional literacy is found in only 10 to 15 percent of the population. Between FY 1975 and FY 1980 it is expected that 500,000 foreign workers will be employed in the Saudi labor force (20:30-31,236-7).

Inadequate administrative and physical infrastructure has long been a major constraint to Saudi Arabia. Port congestion, primitive internal transportation and communications and time consuming procedures have plagued and continue to inhibit Saudi economic development.

Noneconomically productive expenditures by Saudi Arabia represent another constraint to economic development. Although such expenditures are difficult to define and assess economically, an example of this constraint is represented by the military program which retards growth through competition with the civilian sector for trained manpower (18:125-131).

Strategic Overview

Strategic Importance of the Middle East

The strategic and geographical importance of the Middle East has long been recognized by such leaders as Peter the Great and Napoleon as a stepping stone to world domination (14:7-29). This geo-strategic significance was derived from its role as a vital link in Britain's imperial communications with India and its importance in the historic Middle East land bridge between the three

continents of Europe, Africa and Asia (5:150). Ernest Jackh observed that

The three-continental and three oceanic status [of the Middle East] epitomizes the . . . uniqueness of the rectangle between the Arabian Sea and the Indus River and the Indian Ocean. The three coastlines include three peninsulas involving three straits which connect three adjacent seas--the Adriatic, the Black and the Red--with the Mediterranean Sea and also open or lock the exits [5:150].

The Middle East's geographic importance has been virtually eliminated in recent times by modern technology; the advent of the air age and the development of super tankers too deep-draft for the Suez Canal. It is primarily the tremendous oil reserves that make the Middle East of strategic importance (see Figure 2) (8:8-9).

Saudi Foreign Relations

Saudi Arabia's foreign relations in the past have been determined by a desire to maintain good international relations without entering into alliances which might restrict independence of action, a need to maintain the high level of income from the production and sale of oil, a desire to keep out of the Arabian peninsula states whose interests conflict with its own and a desire to conserve the balance of interests in the Arabian peninsula and the Middle East (53:161-175). Underlying these relations have been three ideologies: a strong defense of Islam, Koranic teachings and traditions and holy places; a staunch international and regional opposition to communism predicated

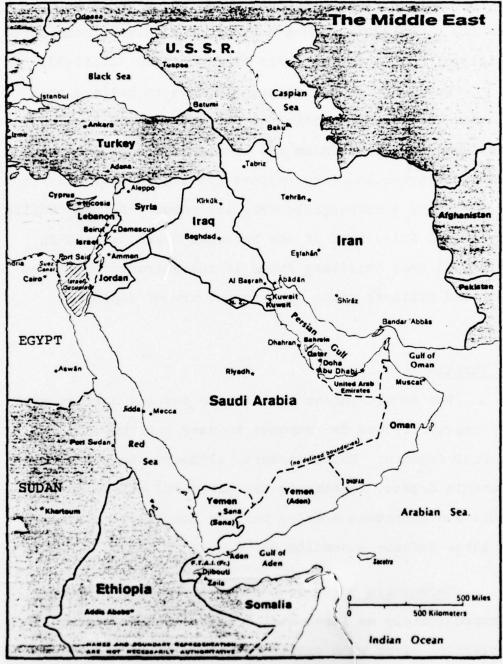


Fig. 2. The Middle East

Source: U.S. Department of State. "Selected Documents, U.S. Policy in the Middle East: November 1974-February 1976." Washington: Government Printing Office, October, 1975.

on the incompatibility of Atheism to Islam; support for the Palestinian people in their quest for a national identity in Palestine and a contempt for Israel, considered an illegal colonization of the Arab homeland (22:51-53).

Saudi Arabia has apparently come to believe that in order to have the ability to implement their foreign relations, to defend Islam and to defend itself against potential aggression from regimes and ideologies, that it had to become a respectable military power. Prince Abdalla Ibn 'abd al-Aziz, head of the National Guard, stated in March 1975 that "military force is the guarantor of peace . . . and military might is a strong arm of diplomacy [22:62]."

The Threat

The Saudi Arabian decision to develop a great military capability was in response to many internal and external factors. These factors, although subject to considerable debate, constitute the perceived threat to Saudi Arabia and represent a major part of the Saudi rationale for large defense expenditures.

Defensible Borders. The Saudi Arabian territory is approximately as large as the United States east of the Mississippi River with resources valued in excess of \$1.5 trillion. Much of the territory is undefined or unclearly defined and subject to dispute with neighboring countries,

many of whom are either ideologically or militarily opposed to Saudi Arabia. The Saudis contend that the territory must be protected and that they, as a sovereign nation, should be able to guarantee the protection of the disputed territories themselves. The Saudis emphasize the fact that the foreign control of Saudi Arabian resources would upset the world order and would cause other nations to enter into a conflict to maintain the present balance of power in the Middle East (36).

Iraqi Conflict. Iraq, located along Saudi Arabia's northern border, has posed a significant threat to Saudi Arabia since 1958 when a radical military regime replaced the traditional monarchy. Although no armed conflict has occurred, Iraq's Soviet supported arms buildup has caused apprehension among Arab leaders who view Iraq as a belligerent socialist nation with radical ideas which would undermine the Saudi Arabian political structure. There have been indications that Saudi Arabian-Iraq tensions have moderated somewhat with the agreement demarcating the joint boundary of the Iraqi-Saudi Neutral Zone and the cessation of the Iraqi propaganda campaign; however, the potential hostility of Iraq is still viewed with considerable concern (21; 41; 44).

Yemen Threat. Yemen (Aden), located along Saudi
Arabia's southern border, represents another significant

threat to Saudi Arabia as both a source of radical Arabianism and as a foothold for leftest socialist forces on the
Arabian peninsula. As recently as 1973, Saudi outposts
along the common border were attacked by forces from Yemen
(Aden). Although Saudi Arabia reestablished diplomatic
relations with Yemen in 1976, Saudis still view Yemen (Aden)
as a source of "alien" ideologies inimical to Islam (21;
41: 44).

Iranian Threat. Iran, located across the Persian Gulf, represents a threat to Saudi Arabia both militarily and politically. In an effort to fulfill the power vacuum created by the British withdrawal from the Persian Gulf region in 1971 and to counterbalance the radical Iraqi regime to the north, Iran has embarked on a massive arms buildup. From 1972 through 1976 Iran has purchased U.S. manufactured defense articles in record dollar amounts which has created a military imbalance favoring Iran. Saudi Arabia has felt that the situation has jeopardized the safety of their oil industry and has restructured their role as the leader of the conservative Arab world and as the protector of the holy places of Islam. Developments in 1975 (a mutual exchange of official visits) reflect a cordial relationship evolving between Saudi Arabia and Iran for peaceful coexistence and for the stability of the Persian Gulf. However, the gestures of cooperation have

not negated the nationalistic fervor of the Muslim Arabs in Saudi Arabia and the Muslim non-Arabs in Iran (18; 21; 40; 41).

U.S. Military Intervention. In May 1974, Secretary of Defense James Schlesinger in response to the Araboil embargo stated, "... it is militarily feasible to mount a military operation against certain oil fields in the Arab littoral of the Persian Gulf [22:57]." Although such military action has not occurred, the possibility of a U.S. invasion of eastern province oil fields has sent shock waves through Saudi Arabia and has emphasized the Saudi need for self-protection (41).

The Straits. The seas and gulfs which virtually surround the Arabian peninsula have been routes of trade and transport since earliest times and control over the narrow straits that connect the seas and gulfs with each other and with the oceans has been a matter of international controversy and conflict for almost as long (34). Three straits—the Strait of Tiran, Bab el Mandeb, and the Strait of Hormuz—pose potential trouble spots for Saudi Arabia. The Strait of Tiran at the entrance to the Gulf of Aquaba, represents Israel's only shipping outlet to the east and contains Jordan's only seaport. Bab el Mandeb, at the southern end of the Red Sea, joins the Red Sea to the Gulf of Aden and the Indian Ocean and represents a

major outlet for Saudi shipping. The strait of Hormuz connects the Persian Gulf with the Indian Ocean and has the commercial and strategic significance for Saudi Arabia as the principle shipping outlet for tankers which carry Saudi oil. Saudi Arabia foresees a need for a strong military to defend her interest in free passage of ships through the straits and as a deterrent to foreign closure or seizure of these important sea lanes (24; 30).

Arab Israeli Conflict. Saudi Arabia perceived the Arab-Israeli situation as an opportunity to profess her policy of pan Arabism and anti Zionism and to enhance her credentials as a leader and new financier of the Arab world through the resupply of arms and equipment. However, with the territorial gains of Israel during the 1967 Arab-Israeli War, Saudi Arabia has become fearful of a preemptive raid by an Israel intent on destroying the financial bases of Saudi military might and thereby eliminating the main source of finance for the confrontation Arab States' rearmament programs (1:67-87; 2).

Soviet Influence. Soviet influence in the Persian Gulf and Arabian peninsula has constituted a significant threat to Saudi Arabia since the late 1960s. Soviet goals, traditionally aligned towards ending the Western monopoly over the region, have given way to more aggressive objectives consisting of: (1) replacement of Western powers

east and south of the Suez; (2) influence over the water-ways through which oil has to be transported; and (3) replacement of the United Kingdom and the U.S. as the dominant external powers in the Arabian Peninsula-Persian Gulf area. As a result, the Saudis have become increasingly apprehensive concerning Soviet military, political and economic objectives (39:700-705).

Historically, the Saudi apprehension is well founded. In the early seventies, the Soviet Union maintained a significant military presence in and around the Persian Gulf and Indian Ocean. From March 1968 through September 1973, the Soviet Navy maintained at least one warship in the Indian Ocean. Gradually, the overt Soviet emphasis on military presence in the Middle East changed towards an emphasis on indirect military, political and economic influence (39:395-9). This change in Soviet emphasis (threat to Saudi Arabia) was addressed by James H. Noyes, Deputy Assistant Secretary of Defense (ISA) for Near Eastern, African and South Asian Affairs.

The Soviet Union does not represent a threat in terms of potential immediate overt military action. In terms of desire to increase influence, to possibly assist subversion in the area—to take other actions detrimental to the stability of the area, I would not want to exclude those threats [40:100].

By 1976, the Soviet Union's military influence in the Middle East was manifested largely through economic assistance; principally in terms of provisioning military equipment, training, and logistical support. Although the degree of assistance varied per individual state, the concept of substantial amounts of economic assistance represented a new and significant threat to Saudi Arabia as well as another effective strategy for increased influence by the Soviet Union in the Middle East. To date, Soviet assistance has contributed to the weakening or elimination of Western influence in many countries—most notably Afghanistan, Egypt, Ethiopia, Iraq, Somalia, South Yemen, and Syria. These countries, along with those depicted in Table 5, are largely equipped with Soviet weaponry and are dependent on the USSR for logistical and technical support (39:701-709).

The most recent example of the growing Russian influence, through military aid, has occurred in Ethiopia. Indeed, Saudi Arabia hastens to point out that Soviet military, political, and diplomatic efforts have resulted in the expulsion of the United States and the transition of Ethiopia from a conservative monarch to a radical socialist state. Coupled with the Soviet Union's privileged military position in Somalia, the Soviet Union has a significant sphere of influence in and around the Red Sea and the Horn of Africa, that represents a direct threat to Saudi interests in that region (39:701-709).

Saudi Arabia also feels that the increasing Soviet influence in the region is creating a conflict of interest

TABLE 5
SOVIET MILITARY ASSISTANCE

	Military Advisors ^a	Military Assistanceb (in millions of U.S. Dollars)
Egypt, Syria, Iraq	4200	4000
Iran, Yemen (Aden), Yemen (Sana) Lebanon	350	450
Somalia, Uganda, Sudan Ethiopia	1100	200

^aFigures represent estimated number of Soviet military advisors in each regional grouping of countries during 1975. Warsaw Pack and the PRC are excluded.

brigures represent estimated values, in millions of U.S. dollars of Soviet military assistance delivered to regional groupings of countries during 1971-1975.

Source: U.S. Congress House of Representatives Hearing Subcommittee of the Committee of Appropriation. House of Representatives. Foreign Assistance and Related Agencies Appropriation for 1978 Part 3, Hearings, 95th Congress, 1st Session 1977. Washington: Government Printing Office, 1977.

between the superpowers concerning Saudi energy supplies. This Soviet influence poses a threat to the stability of the region as well as a threat to Saudi Arabian survivability as a free and independent state. The geographical proximity of the Soviet Union to essential U.S. oil supplies represents a significant opportunity for Soviet exploitation of a favorable situation. Possible ploys include Soviet disruption or prevention of U.S. oil supplies through support of radical Arabian factions while simultaneously increasing European and Japanese dependence on Russian oil and gas. As a result of such dependence, Europe and Japan could possibly be driven towards neutralism while the U.S. could be forced to make additional political concessions (14:28-45).

Presently Saudi Arabia views the Soviet threat with mixed emotions. The Soviet Union has maintained a cautious and constrained attitude towards intervention in Saudi Arabian affairs. This attitude has been based on the Soviet belief that military action against Saudi Arabia (or any other state in the Middle East region) would destroy Soviet political and economic relations with all other states in the area. These states could then possibly be directed (possibly unwillingly) towards the U.S. sphere of influence. The Soviets' cautious attitude on bilateral intervention has been offset by a Russian arms sales policy that is exerting considerable influence on nations hostile

to Saudi Arabia. As a result, Saudi Arabia fears not only Soviet military actions but Russian influenced insurgencies from surrounding countries (14:28-45; 39:701-709).

Summary

This chapter has discussed the cultural, economic, political, military and strategic background of Saudi Arabia. It was not intended as a complete review of all Saudi Arabian internal and external developments; it has nevertheless formed a substantial basis for analyzing the political, economic and strategic effects of U.S. FMS to Saudi Arabia. It has revealed Saudi Arabia as an economically wealthy nation by virtue of its major natural resource—oil. While on the other hand, it has revealed Saudi Arabia as a politically threatened, potentially unstable, nation constrained by a harsh environment and a paucity of skilled manpower within a narrow population base. Militarily, it has shown that the cost of the Saudi

⁴Significant advantages of the Soviet arms policy include:

⁽¹⁾ Pricing of arms lower than comparable U.S. equipment--founded primarily on what the market will bear.

⁽²⁾ Selling arms at favorable terms.

a. Payment usually 8-10 years at 2-2.5 percent interest after a grace period of one to three years.

b. Frequent reductions or postponements of payments when a country is unable to pay.

⁽³⁾ Discounts of an average of 20 percent from list prices.

⁽⁴⁾ Accommodations in supplying the latest and most modern weapons system.

military establishment is high and that costs are spiraling. However, the size of the Saudi military is less related to an economic base than to total population. Strategically the chapter has shown that Saudi Arabia has become surrounded by ideological, strategic and political conflicts which threaten the country's existence. Saudi Arabia's regional role is one of countering communism and the influence of the Soviet Union, resisting the enmity of Yemen (Aden), Iraq, Somalia, and others, while deterring the antagonisms of Israel, Iran, Egypt and Ethiopia. Additionally, Saudi Arabia is maintaining the security of the Red Sea, Persian Gulf and the whole of the Arabian Peninsula.

CHAPTER IV

MILITARY EVOLUTION AND CURRENT MILITARY FORCE STRUCTURE

Military Evolution

Saudi Arabia was initially created between 1902 and 1926 when Abd al-Aziz Ibn Saud retook various towns and tribes that had been captured in 1891 by rival tribes under the Rashid family. Abd al-Aziz Ibn Saud, with a small band of followers, recaptured Riyadh, the former seat of the Saudi empirate, in 1902. By 1906 the Saudi forces had regained the central Nejd. During this early period, Saud's forces were mainly made up of Bedouin tribes of the militant puritanism of the orthodox Islamic sect, and an increasing number of the Nejdi tribes (53:321).

Abid al-Aziz Ibn Saud realized that his position depended upon the sometimes uncertain loyalty of the tribes and towns under his rule. Saud sent Wahhabi missionaries to the tribes to ". . . promote the establishment of Ikhwan (religious brotherhood) communities of mixed tribal composition [53:321]." He provided seed, farm tools, money, arms and ammunition as well as mosques, schools and homes were built and religious teachers were provided. These Ikhwan villages grew rapidly in number and provided Saud with thousands of fighting men in support of his campaign

to unite the peninsula. The Ikhwan could be completely mobilized within 96 hours, with 25,000 men, although 5,000 men were normally called upon to take part in action (53:321-322).

In October 1914, Abd al-Aziz allied himself on the side of the British against Turkey. The Rashids, who allied themselves with Turkey, attacked deep within the Saudi territory. In January 1915 a battle was fought northeast of Burayda with both sides withdrawing and claiming victory. A treaty was negotiated with the British in December 1915 where the British gave recognition of Saudi independence and the territorial integrity of the Nejd as well as gifts. In late 1916, Abd al-Aziz was given a monthly subsidy of £ 5,000 and a gift of 3,000 rifles with ammunition in exchange for keeping 4,000 men in the field against the Rashids. On November 2, 1921, Abd al-Aziz conquered the Rashidi capital of Hail and assumed the title of Sultan of Nejd and its dependencies with the endorsement of the British (53:322).

After the fall of Hail in 1921, the Ikhwan emboldened by their successes, disregarded Abd al-Aziz's orders not to cross into Transjordanian territory and raided and plundered several key oases arousing the British allies of the Hashemite King of Transjordan to counter attack with aerial support. The Ikhwan raiders were decimated. Then in 1924, Abd al-Aziz announced his intention of invading

the Hejaz, despite British warnings against such actions, when Husein, the Hashemite King of the Hejaz, laid claim to the Caliphate of Islam. The undisciplined Ikhwan forces pillaged Taif and massacred several hundred of its inhabitants before Abd al-Aziz could reassert his control (53:322-323). Abd al-Aziz regained control by the use of a separate armed force created during the early 1920s. This separate armed force, called the "White Army," is presently the Saudi National Guard (24:314). During the next fifteen months Abd al-Aziz's forces occupied Mecca and laid siege to Jidda and Medina, which surrendered in December 1925 (53:322-323).

Abd al-Aziz was occupied with creating the governmental organization to rule the vast, disparate territory which had been conquered. During the two years this took, Abd al-Aziz began building up an army and he forbade the Ikhwan to continue their raiding. Many Ikhwan leaders felt betrayed and sought the King's ouster. These Ikhwan leaders led the Mutayr and Ajman tribes in rebellion and started indiscriminate raiding, including raids into Iraq, Transjordan, and Kuwait, which were all under British protection. Also, the British High Commissioner in Iraq secretly agreed to the building of a series of forts along the Iraq-Nejd frontier in violation of the 1922 treaty between the British forces and Abd al-Aziz. In late 1928, the tribal Ikhwan in the vicinity of the border, took

matters into their own hands and massacred the personnel engaged in building the forts. The British Air Force retaliated by bombing the tribal camps across the border. Undeclared warfare broke out along the border, and the Ikhwan forces raided into Iraq and Kuwait territory again (53:323).

After meeting with the rebel Ikhwan leaders who refused to surrender, Abd al-Aziz again mobilized his regular troops to put down the rebellious Ikhwan. Abd al-Aziz negotiated with the British and obtained forty-four military aircraft and British pilots to fly them. In addition, Abd al-Aziz also acquired a fleet of 200 auto-mobiles and trucks. Using the aircraft and his fleet of automobiles and trucks Abd al-Aziz personally led the force against the rebellious Ikhwans. By the end of January 1930, the Ikhwan were defeated and were never to pose a threat to the Saudi regime again (24:314).

The 1930s were peaceful years for Saudi Arabia with the exception of the period 1931 to April 1934. During the early period of the 1930s, Yemen forces invaded occupied Najran, which lay inside Saudi territory. The first incidents were in 1931 and the trouble was not ended until April 1934, when Abd al-Aziz counter attacked across the frontier into Yemen. After a successful campaign, a treaty was concluded at Taif (20:314-315).

The remaining years of the 1930s gave Abd al-Aziz time to carry out his plans for developing a military force. A strong National Guard was built up using man-power recruited from Bedouin tribes that continued to support the House of Saud. These tribes also contributed men to the Royal Guard, an elite force whose sole mission was to safeguard the royal family. A regular army was built up of recruits from other loyal but lesser tribes and was used to complement and counterbalance the National Guard (24:315).

During World War II Saudi Arabia remained neutral until February 1945 when Abd al-Aziz declared war on Germany and Japan. However, no troops were contributed to the war effort. In 1948 a noncombatant battalion was sent to the Egyptian section of the Arab forces during the Palestine War of 1948. In 1953, when Abd al-Aziz died, the Saudi forces had no real combat forces. However, one major organization of the military was achieved before Abd al-Aziz died. The Ministry of Defense and Aviation was established in 1944 and was the first formal organization created by the King. This formal organization was to oversee the development of the armed forces and was attached to the royal cabinet (24:312-315).

Abd al-Aziz was succeeded by his son, Saud. King Saud ruled during a fairly turbulent period when several countries around Saudi Arabia were overthrown by civil wars and military coups. These situations produced many tense moments between Saudi Arabia and its regional neighbors during the 1950s and 1960s. In April 1957 King Hussein of Jordan asked for military assistance from King Saud, to contain Syrian forces on Jordan's northern borders. A small armed unit was sent to Amman in Jordan to show Saudi support for Hussein's authority. Because of this show of force, armed conflict was avoided and the possibility of revolution in Jordan was abated (24:315-316).

In 1958, King Saud gave Crown Prince Faisal, the prime minister, full executive powers. Prince Faisal immediately began to develop a viable military establishment. The building of a military force was increased in mid-1958 when King Faisal of Iraq and many others of his family and party were killed during a military coup d'etat on July 14. After these violent years, four peaceful years went by before a civil war in Yemen (Sana) began (24:316).

In September 1962, an army coup led by Colonel Sallal against Iman Muhammadal Badr, the Yemen King, began a civil war in Yemen (Sana) that was not resolved until 1969. The Yemen rebels were backed by Egypt and the Free Yemenis, of Southern Yemen (which became the people's Democratic Republic of Yemen (Aden) in 1976). The King of Yemen fled to Saudi Arabia. King Faisal quickly moved troops to the Yemen (Sana) border and announced his support of the King of Yemen. Soon the supporters of the King of

Yemen were fighting against Egyptian forces sent by Nassar. In November 1962, Egyptian aircraft penetrated Saudi Arabian airspace and bombed some Saudi border villages. The United States, at Faisal's request, dispatched a squadron of F-100 aircraft to Saudi Arabia. However, Faisal favored disengagement of all forces rather than an offensive role for Saudi Arabia despite the Saudi's strength and readiness. Saudi-Egyptian relations were very strained and diplomatic relations were severed in November 1962. Fighting continued in Yemen until mid-1963 when Saudi Arabia and Egypt signed a disengagement agreement that provided for a United Nations truce observation mission to be sent to Yemen (Sana). Before the end of 1963, however, hostilities had broken out in Yemen (Sana) again (24:316-317).

Because of many problems—both internal and external, King Saud was deposed in favor of Faisal, in 1964. Faisal began to modernize the military and to reorganize the military into its present—day form. The best means of modernization of the military was discussed with the U.S. and the United Kingdom. Also Faisal met with Nassar and together agreed that Saudi Arabia and Egypt would stop supplying military aid and men to the combatants in Yemen (Sana). The agreement was not immediately implemented and hostilities continued for the next two years at a lower level (24:317).

After the Yemeni civil war, Saudi Arabia was not involved in armed conflict. Although in the June 1967 and October 1973 Arab-Israeli Wars, Saudi Arabia contributed some troops in support of the Arab war efforts. In 1967 King Faisal sent a brigade into southern Jordan, that still remains there. Also a Saudi force was stationed at Kisivah, near Damascus, Syria in October 1973. Both forces were still there at the end of 1976 (24:317).

After Faisal became King in 1964, the entire military was reorganized with two of Faisal's half brothers heading the offices of Minister of Defense and Aviation, and Minister of Interior. Another half brother was named as head of the National Guard. In March 1975, King Faisal was assassinated and Khalid Ibn Abdel Aziz al Saud became King (24:317).

Current Force Structure

Air Force are the conventional missions of safeguarding the integrity of the national boundaries (many of which are still undefined) and protecting the country against foreign penetration and invasion. The mission of the Saudi Arabian National Guard is to maintain internal security. In times of grave danger, all four would help with each other's missions. A secondary mission of the Army and National Guard is to guard against possible military insurgencies.

This is accomplished by special sections in each branch.

Two other military type forces are also used to provide internal and external security. These two are the Frontier Force and the Coast Guard (24:317-320).

The missions of the various forces are also shown in the command structure. The Minister of Defense and Aviation is in control of the Army, Navy and Air Force, and is in charge of the two missions previously mentioned. The National Guard is an autonomous organ of government and is under the personal control of the King through a commander personally selected and appointed by the King. The Frontier Force and the Coast Guard are under the control of the Minister of Interior who is responsible for internal security. Overall, the King is the Commander in Chief of the military forces in Saudi Arabia. He controls these forces by placing relatives, usually brothers or half-brothers, or men who are dedicated to the Saud family, in control of the different forces (24:318).

The total military strength of Saudi Arabia is estimated to be 73,550 men. A breakdown of the different services shows that the Army has 40,000 men, the Navy has 1,500 men, and the Air Force has 5,550 men. The National Guard is composed of 20,000 Bedouin tribesmen. The Frontier Force and Coast Guard has 6,500 men. The Armed Forces are divided into nine area commands with boundaries that are not clearly defined. These forces are located near the

major cities or near the borders of neighboring countries (see Figure 3). The National Guard is also stationed near major cities and the borders of neighboring countries but are primarily set up for protection of the major cities and to prevent military interactions (24:319-321).

Navy, plus the Frontier Force and the Coast Guard are made up of a reasonable cross-section of the population. The National Guard personnel are recruited from the Bedouin tribes in the areas in which they serve (24:324). All the military personnel are volunteers with recruits enlisting for three year periods (19:71). The structure of the services is set up along the lines of the United States services. Also, like the U.S., free medical, dental and hospitalization in a military hospital, are provided to members of the military services and their dependents. Their pay compares equally with other Saudi governmental services and they are probably the best paid in the Arab countries (24:325-327).

Royal Saudi Army

The Royal Saudi Army is the dominant armed force in Saudi Arabia. The Army is comprised of several different units. The Army has one armored brigade, four infantry brigades, one parachute battalion, three artillery battalions, six anti-aircraft battalions and ten Surface to

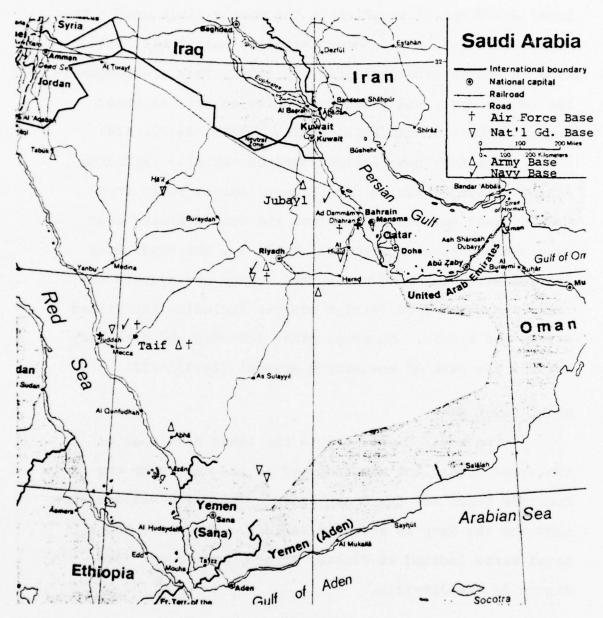


Fig. 3. Saudi Military Bases

Source: U.S. Department of State. "Background Notes: United States and Saudi Arabia." Washington: Government Printing Office, October, 1975.

Air Missiles (SAM) batteries. In addition, there is the Royal Guard battalion which is the most visible unit. The Royal Guard was an autonomous military unit until 1964 when it was incorporated into the Army. They are responsible to accompany and protect the King as well as other senior members of the Royal family (19:71; 24:320-324).

The Army has numerous armored vehicles including AMX-20 armored vehicles from France, AML-60 tanks from France, M-47 and M-41 tanks from the United States plus many other weapons as shown in Table 6. The Saudi Army has and still is being modernized. Many new systems are being purchased from foreign sources including the United States and France. Numerous other infantry and artillery weapons are part of the army's arsenal (24:321-322).

Royal Saudi Navy

The Royal Saudi Navy is the least developed of the armed forces and was assisted in its duties by the Frontier Force and the Coast Guard. The major weapons systems for the Navy is shown in Table 6. There are three naval bases located at Jiddah, Riyadh, and Jubayl (see Figure 3) (24:319-321).

Royal Saudi Air Force

The Royal Saudi Air Force has made significant progress in both growth and sophistication since Faisal's decision in 1965 to concentrate on its development. In

TABLE 6
WEAPONS SYSTEMS 1976^{a,b}

Tanks	
<u>Model</u>	Number
AMX-30 Main Battle Tank AMX-60 Medium Battle Tank M-47 Medium Battle Tank M-41 Light Battle Tank Scorpion Light Battle Tank	300(100) (250) 25 60 (250)
Armored Vehicles	
<u>Model</u>	Number
AML 60/90 Armored Cars AMX-10P AFV M-113 APC APC (Type Unknown) AMX-30SA SP-AA	200 250 UN (250) (UN)
Missile Systems	
Model	Number
Hawk Surface to Air Missile (SAM) Rapier SAM Crotale SAM Vigilant Anti-Tank Weapon (ATW) Harpon, S-11 ATW Sidewinder-Air to Air (AA) Matra-AA	UN (300) C (UN) UN (UN) 300 C UN C UN (960) C UN (228)
Helicopters	
<u>Model</u>	Number
Alouette III AB-204 AB-205 AB-206 Seeking and Commando	12(10) 1 24 16 (30)

TABLE 6--Continued

Aircraft

Model	Number
F-5A Fighter/Bomber (F/B) F-5B F/B	50 20
F-5E F/B F-5E/F F/B	90 (100)
BAC-167 Counter Insurgency (COIN) F52/3/4 Lightning	30 34
Mirage III F/B Strikemaster Train/GNP Attack	38 30(10) 32
F-86/T-33 Train/GNP Attack T-41 Trainer C-130 E/H	8 24
KC-130 E/H KC-130 Mirage V ES/DS	4(10) (38) ^d
Boeing 707 Falcon 201	2 2

Ships

<u>Model</u>	Number
Fast Patrol Boat (FPB) Patrol Boat	3 (6) ^e 31
Patrol Boat (Destroyer Escort) Landing Craft	20 (4)
MCM SRN-6 Hovercraft	(4)

aArtillary is not included in this table.

Sources: This table was compiled from four sources: (1) "The Almanac of World Military Power," (2) "The Military Balance 1976/77: The Middle East and the Mediterranean. Saudi Arabia," (3) "Arms in the Indian Ocean: Interests and Challenges," and (4) "U.S. Arms to the Persian Gulf: \$10 billion since 1973" (11; 19; 30; 4).

b_{Numbers} in parentheses are on order.

CEstimates.

dBelieved to be for Egypt.

eIncludes 2 Jaguar class and 1 ex-Coast Guard cutter.

1976, the Air Force was made up of two fighter-bomber squadrons, two counterinsurgency (COIN) training squadrons, two interceptor squadrons, two transport squadrons, and two helicopter squadrons. There are four air bases located close to major cities but separated from each other. These are at Jiddah, Taif, Riyadh, and Dhahran (see Figure 3). The small but modern Air Force had several aircraft available for use in 1976. These included the F-5E from the United States, BAC-167 from United Kingdom, Agusta-Bell 206A and Agusta-Bell 205 helicopters from Italy (24:320-323). A detailed list of weapons systems is shown in Table 6.

Royal Saudi National Guard

The Royal Saudi National Guard was recognized in 1972 as being substantially weakened as Faisal developed the Army and Air Force. In 1972 the National Guard was started on the way to becoming modernized and strengthened. By 1976 the National Guard seemed to have returned to its former equal standing, especially in relation to the Army (24:320-321).

The National Guard has numerous installations near major cities and many border locations (see Figure 3).

These are all mobile units under the control of four area commands that are linked to the commander in Riyadh. The National Guard also has "irregular" members (Muhahidin) in

almost all communities. The total number is unknown but they provide an increase in the ability of the National Guard in times of emergency to deal with a threat to internal security anywhere in the country (24:320).

The weapon strength of the National Guard in 1976 was difficult to ascertain from documents available to the public but, because of its relationship to the Royal Family and its function as a counterweight to the Army, one can assume that the Guard was adequately equipped to carry out its mission [24:323].

Auxiliary Forces

The Frontier Force and the Coast Guard constitute the auxiliary forces. Their assignment tends to be in administrative affairs such as managing the relations between settled and nomadic Bedouins, Civil Defense, and border and port security. These two units combined constitute a larger force than the Royal Navy and is almost as large as the Royal Air Force. Major weapons for the Coast Guard are eight Hovercraft and about twenty-five patrol boats (24:320).

Summary

Chapter IV has revealed Saudi Arabia as a relatively new country with a developing yet clearly insignificant military. Historically, Saudi Arabia has been plagued by a multitude of tribes each professing different religious attitudes and military philosophies. Despite consolidation of these tribes by Abn al-Aziz Ibn Saud in the first

quarter of the Twentieth Century, Saudi Arabia has remained a largely primitive, nonmilitaristic society. Although efforts are being made to modernize the Saudi Arabian military within an established structure, the Saudi military is still almost totally undeveloped.

CHAPTER V

UNITED STATES FOREIGN MILITARY SALES TO SAUDI ARABIA

Introduction

The U.S. foreign military sales program is part of a U.S. Security Assistance Program that is divided into two categories: (1) construction assistance, and (2) military export sales. The U.S. FMS Program, a subdivision of military export sales, includes only the government-togovernment sales which provide for the delivery of military hardware, technical services and assistance for cash payment (13:3). The program normally does not include construction assistance (management assistance that is provided by the U.S. Corps of Engineers for attainment of foreign government objectives), or commercial sales (a subdivision of military export sales that refers to the direct sales of military hardware by commercial contractors) (43:147,218-219). In the case of Saudi Arabia, because of the magnitude of the U.S. Security Assistance Program, the nature of the accounting and reporting system, and the different Congressional opinions on the definitions of foreign military sales and construction assistance, the relative boundaries of what is FMS and what is construction

assistance are not clear (37:83). As a result, this chapter will discuss both U.S. foreign military sales and U.S. construction assistance to Saudi Arabia.

Overview of U.S. FMS to Saudi Arabia

Saudi Arabia has been receiving defense articles and services through U.S. military assistance grant aid programs, foreign military sales and commercial sales programs since the late 1940s. As of 1976 the U.S. had provided approximately \$36 million in grant aid and \$11.9 billion in FMS and \$153 million in commercial sales (13:4; 46:1-27).

The present U.S. security assistance program to Saudi Arabia is essentially an outgrowth of the U.S. Mutual Defense Assistance Act of 1949 which was designed to provide military assistance to foreign governments as grant aid. Virtually all military equipment provided to foreign countries in the early 1950s was given away. Provisions within the Act for "reimburseable aid" under which a foreign government could reimburse the United States for the value of assistance rendered were primarily included to accommodate countries who didn't want free equipment. Saudi Arabia was one of those unique countries (13:5).

Throughout the entire U.S. Security Assistance

Program, Saudi cash purchases have exceeded U.S. provided
military assistance. In 1965 cumulative Saudi FMS orders

were \$2.140 billion contrasted with \$31.663 million in military assistance. By FY 1970 total cumulative FMS had increased by \$111.7 million while military assistance had increased by less than \$3.3 million. Through FY 1976 military assistance has increased by slightly more than one million dollars while FMS has grown by \$9.7 billion (46:1-27).

A comparison of total United States foreign military sales orders with Saudi sales orders since 1965 is presented in Figure 4, while Tables 7 and 8 contrast the total U.S. military assistance program and U.S. commercial sales programs to the respective Saudi country program. It is important to note that the character of U.S. worldwide arms trade has changed in two significant ways. First, there has been an increased emphasis by the United States on FMS in lieu of grant aid; and second, Saudi Arabia has received an increasingly greater percentage of U.S. FMS since 1973 (see Table 9). Since 1973 Saudi Arabia has moved progressively from sixth to third to first on the list of top 20 countries that purchase U.S. arms (13:5; 23; 46:1-27).

Focus of FMS to Saudi Arabia by Region

In a historical perspective, the character of the U.S. worldwide arms trade has changed significantly since 1973. Prior to 1973 the largest proportion of arms sold

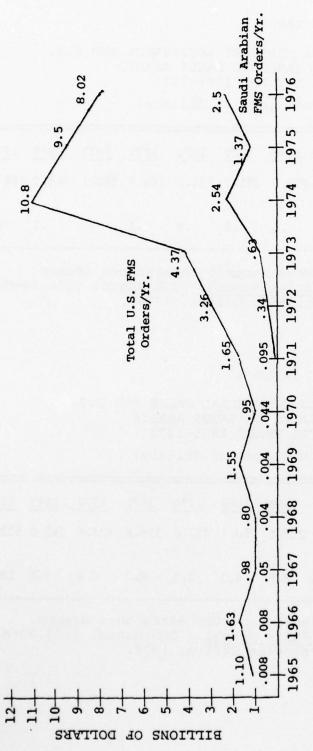


Fig. 4. Total United States Foreign Military Sales Order and Foreign Military Sales Orders to Saudi Arabia for Fiscal Years 1965-1976.

September, 1975 as a result of the congressional change in the fiscal year commencing in October and the final quarter of 1976 through 31 December 1976. NOTE: 1976 figures include both the transition quarter from July-

U.S. Defense Security Assistance Agency. Military Assistance 1. DOD Manual 5105.38-M. Washington: Government Printing and Sales Manual. Office, 1974. Source:

TABLE 7

TOTAL UNITED STATES MILITARY ASSISTANCE AND U.S. MILITARY ASSISTANCE TO SAUDI ARABIA FOR FISCAL YEARS 1966-1975

(values in millions of dollars)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
U.S.	970.6	875.7	592.6	453.0	381.7	755.0	545.9	590.1	784.9	584.1
Saudi Arabia	.7	.7	.7	.5	.5	.6	.4	.2	.2	.04

Source: U.S. Defense Security Assistance Agency.

Military Assistance and Sales Manual. DOD Manual 5105.38-M.

Washington: Government Printing Office, 1976.

TABLE 8

TOTAL UNITED STATES COMMERCIAL SALES AND U.S. COMMERCIAL SALES TO SAUDI ARABIA FOR FISCAL YEARS 1965-1974

(values in millions of dollars)

	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
U.S.	155.7	196.4	238.0	257.1	250.8	437.6	396.8	423.6	362.0	502.1
Saudi Arabia	.9	14.9	33.6	35.5	6.3	12.7	8.2	6.4	5.6	18.0

Source: U.S. Defense Security Assistance Agency.
Military Assistance and Sales Manual. DOD Manual 5105.38-M.
Washington: Government Printing Office, 1976.

TABLE 9

PERCENTAGE OF U.S. ORDERS PLACED BY SAUDI ARABIA

(in billions of dollars)

	1973	1974	1975	1976
U.S. FMS orders	4.73	10.80	9.50	8.02
Saudi FMS orders	63	2.54	1.37	2.50
	14.41%	23.52%	14.42%	31.17%

Source: U.S. Arms Control and Disarmament Agency. World Military Expenditures and Arms Transfer 1966-1975. Washington: Government Printing Office, 1976.

on a government-to-government basis by the United States went into the arsenals of Western European nations that were members of the North Atlantic Treaty Organization (NATO). However, in the last several years, the percentage of the worldwide total of U.S. foreign military sales deliveries which have gone to NATO countries has declined whereas the percentage delivered to the Persian Gulf countries, which includes Saudi Arabia, Iran and Kuwait and Oman, have increased significantly (see Tables 10 and 11) (41:2-7).

In fiscal year 1976, the United States sold \$8.368 billion worth of arms worldwide and more than \$3.933 billion to Persian Gulf countries, Saudi Arabia, Iran and Kuwait. Saudi Arabia with \$2.502 billion in signed foreign military sales agreements represented 30 percent of the U.S. worldwide total sales and 64 percent of the total U.S. sales to

TABLE 10

U.S. FOREIGN MILITARY SALES DELIVERIES (percentage of worldwide total)

	1970	1971	1972	1973	1974	1975
NATO Countries	44	43	45	32	23	25
Iran, Kuwait, Saudi Arabia, Oman	10	7	18	24	24	37

Source: U.S. Congress. House of Representatives. Committee on International Relations. <u>United States Arms Sales to the Persian Gulf</u>. Report. 94th Congress, 1st Session. Washington: Government Printing Office, 1975, pp. 2-7.

TABLE 11 U.S. MILITARY ARMS SALES ORDERS IN THE PERSIAN GULF $^{\mathrm{a}}$

Fiscal Year	Saudi Arabia	Iran	Kuwait	Oman
1972	\$ 337	\$ 524	\$ b	\$ b
1973	622	2,114	b	b
1974	2,539	3,917	30	b
1975	1,374	2,568	370	1.6

amillions.

Sources: (1) "Foreign Military Sales--A Growing Concern," Comptroller General's Report to the Congress." Washington: U.S. Government Accounting Office, B-165731, June, 1976, p. 8. (2) U.S. Defense Security Assistance Agency. Foreign Military Sales and Military Assistance Facts. Washington: Government Printing Office, 1975, p. 46.

bless than \$55,000.

Persian Gulf countries and was first in U.S. FMS purchases (13:5; 41:4-6,23). Table 12 depicts the top 20 purchasers of U.S. arms in FY 1976 (23).

Size of Undelivered Orders

Although cumulative sales orders to Saudi Arabia have grown dramatically since 1971, cumulative deliveries have not kept pace. The result has been that undelivered orders have increased greatly since 1971 (see Figure 5). From 1966 to 1971 undelivered orders averaged \$2.085 billion, whereas undelivered orders grew in 1972 to \$2.369 billion, in 1973 to \$2.887 billion, in 1974 to \$5.210 billion, in 1975 to \$6.268 billion, and in 1976 to \$10.111 billion. In brief, undelivered orders in 1976 amounted to over five times the amount of undelivered orders in 1971 (13:6; 46:16-17). The large amount of undelivered orders principally reflects a tremendous escalation in the quantity of arms and a significant increase in the sophistication of the arms that have been sold to Saudi Arabia (13:6). For instance, on September 1, 1976, in two separate letters of offer (contracts), 650 Maverick missiles and 850 Sidewinder missiles costing \$30 million and \$25 million respectively were requested by Saudi Arabia. These missiles represented the state-of-the-art in missile technology and yet comprised only 8 percent of the cumulative sales orders

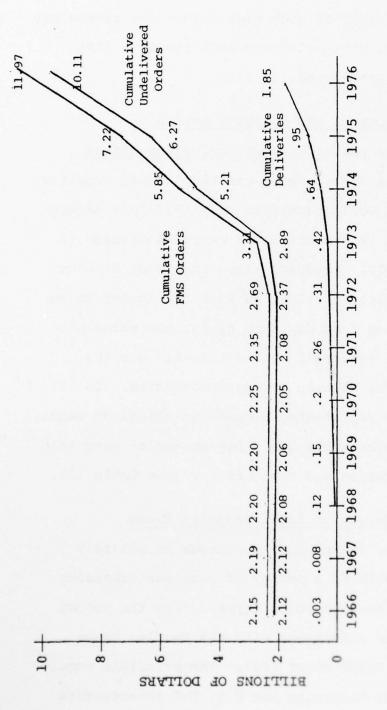
TABLE 12

FOREIGN MILITARY SALES AGREEMENTS WITH THE UNITED STATES SIGNED DURING FISCAL YEAR 1976

(in millions of dollars)

Saudi Arabia	\$2,502.5	Kuwait	\$ 130.6
Iran	1,301.3	Morocco	120.8
Israel	919.5	Ethiopia	118.8
South Korea	625.9	Thailand	89.6
Switzerland	454.7	Greece	83.0
Jordan	436.1	Spain	79.4
Australia	411.9	Egypt	67.3
West Germany	194.2	Canada	65.8
Taiwan	193.0	Great Britain	46.5
Yemen	138.5	Pakistan	38.6
			\$ 8,018

Sources: (1) "Foreign Military Sales--A Growing Comcern," Comptroller General's Report to the Congress. Washington: U.S. Government Accounting Office, B-165731, June, 1976; (2) Norton, Dr. Leslie N. Professor of Logistics Management, School of Systems and Logistics, AFIT/SL, Wright-Patterson AFB, Ohio. Personal interviews conducted intermittently from 4 January 1977 to 23 February 1977.



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Growth Trends of Foreign Military Sales Orders, Deliveries, Undelivered Orders since Fiscal Year 1966-1976.

Sources: (1) "Foreign Military Sales--A Growing Concern," Comptroller Washington: Government Mashington: Government Accounting Office, June, 1976, p. 8; (2) U.S. Defense Security Assistance Agency. Military Sales and Military Assistance Facts. remaine Office, 1974. AD-A047 435

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AN INVESTIGATION OF THE SCOPE, PURPOSE, AND EFFECTS OF UNITED S--ETC(U) SEP 77 B L DYCUS, J A FIORILLO AFIT-LSSR-25-77B

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received for one quarter (July 1 - September 1, 1976)

(44:53-55). As a result of such high volume and technology

Saudi weapon systems deliveries are made three to five

years after orders are placed (13:6).

Sources of FMS to Saudi Arabia

Report B-165731, the Soviet Union was the largest supplier of weapons to third world countries from 1950-1974 exceeding U.S. exports by 12 percent. The margin increased to 50 percent in FY 1975. However, since the Saudi Arabian policy of not maintaining relations with the Soviet Union excluded the Russians from any arms deals, the principle sources of military equipment to Saudi Arabia was the United States and the Western European countries. In 1976 United States sales represented almost two-thirds of Saudi Arabian arms purchases while the other one-third were sold by France, Great Britain and West Germany (see Table 13).

U.S. Survey of Saudi Security Needs

In the early 1960s Saudi purchases of military equipment was a result of a policy of cautious expansion in light of the threats posed by Egypt during the Yememi Civil War and border skirmishes with the Peoples Democratic Republic of Yemen after 1967. The principle acquisitions were British Lightning and U.S. F-5 interceptors and U.S. Surface-to-Air (SAM) missiles (40:229-255).

TABLE 13

TOTAL ARMS TRANSFERS OF MAJOR SUPPLIERS FROM 1965-1974

(million current dollars)

to collect	Total	U.S.	France	United Kingdom	All Others
Saudi Arabia	1038	473	190	336	39

Sources: (1) "Foreign Military Sales--A Growing Concern," Comptroller General's Report to the Congress. Washington: U.S. Government Accounting Office, B-165731, June, 1976, p. 5. (2) U.S. Congress. House of Representatives. Committee on Foreign Affairs. United States Arms Sales to the Persian Gulf. Report. 94th Congress, 1st Session, Washington: Government Printing Office, 1976, p. 45.

These major weapons systems persisted through the early 1970s as the mainstays of the Saudi military. 1

However, in 1974 the Saudi Arabian government, apparently recognizing their outdated weapons inventory, requested a United States survey of its armed forces with a view towards modernization. The United States agreed to the request (40:229-255). On November 9-11, 1974, in Riyadh, Saudi Arabia, Mr. Robert Ellsworth, Assistant Secretary of Defense for International Security Affairs,

In mid-1966, the British delivered a package of Hawker aircraft refurbished Thunderbird SAMS, crews and support personnel during the height of the North Yemen Civil War and in 1968-69 the Saudis ordered armored cars from France, helicopters from Italy and patrol boats from Germany. However, these purchases represent a Saudi attitude towards diversified arms reliance rather than a significant weapon system acquisition (40:229-255).

headed a United States Government delegation during the Joint United States-Saudi Arabian Commission on Security Cooperation. Acting as a consultive delegation, not a decision-making body, the delegation's principle role was to review programs already underway for modernization of Saudi Arabia's armed forces in light of the Kingdom's defense requirements and to discuss regional and strategic considerations designed to put U.S. and Saudi security interests in a broader context. The delegation responding to a DOD assessment of Saudi military requirements for the next ten years submitted a Saudi force design capable of (1) deterring aggression, (2) defeating an enemy, (3) assisting in the maintenance of internal order and security, and (4) contributing to the Saudi's moderating role in the Mideast (40:136,229-255). The survey mended modernization of existing forces with a reduction in overall strength but an increase in effectiveness through greater mobility and firepower. The survey stressed that the Saudis should limit force development and equipment acquisition to units and systems that would be selfsustaining and able to be absorbed within the limited manpower base of the Saudis after a reasonable period of training assistance. Recommendations were also made to pursue different actions, where existing contract negotiations to acquire equipment exceeded the current Saudi needs and/or capabilities. Overall, the survey contained

over 100 recommendations for improvement and modernization of the Saudi armed forces with a major proportion of the recommendations focusing on defense management concepts rather than hardware items (37:10).

Specifically, the report made the following recommendations:

- 1. The development of:
- a. Four mechanized brigades each with three mechanized infantry battalions.
- b. One airborne brigade with three airborne infantry battalions and support groups.
 - c. A tank battalion.
- d. An aviation group headquarters with two assault helicopter battalions.
 - e. One attack helicopter battalion.
- f. Two air cavalry battalions and two assault helicopter companies.
 - 2. The purchase of:
 - a. 440 helicopters between 1978 and 1984.
- b. 26 new ships including torpedo boats, patrol chasers, patrol gunboats and minesweepers (40:229-255).

The survey also provided for the following broad defense objectives by 1984:

a. The Navy would increase from nothing to about 3000 men.

- b. The Army would increase from approximately 45,000 to 72,000 men.
- c. The Air Force would increase from 14,000 to 22,000.
- d. The National Guard would be maintained around 35,000 (40:221).

As a result of the Saudi Arabian Government's response² to the survey, the Saudi armed forces have evolved from a slowly expanding defensive posture prevalent from 1970-1973 into the midst of a major expansion in both equipment and capabilities as demonstrated by the number of military sales in CY 1976 (see Table 14) (40:229-255; 44:75).

U.S. Foreign Military Sales and the Saudi Armed Forces Expansion Program

As discussed previously, the Saudi Arabian armed forces are expanding their capabilities within each of the separate services--Army, Navy, Air Force, and National Guard. The following is a discussion of the role of U.S. FMS in that expansion.

Tables 15, 16, and 17 represent the estimated unclassified U.S. FMS to the Saudi Arabian armed services.

The Delivered columns show the total number of weapons

²All Saudi purchases of U.S. military equipment are supposedly a direct result of the survey. Due to the classified nature of the survey, verification is not possible and such response is only presumed.

TABLE 14
U.S. MILITARY SALES TO SAUDI ARABIA--1976a

Prior to September 1	Millions
150 M60 tanks	118.0
1,000-plus armored personnel carriers	124.0
Vulcan antiaircraft cannon	41.0
1,000 Maverick missiles	47.0
4,000 Dragon antitank missiles	26.0
Al Batain cantonment	1,450.0
F-5 program expansion	1,500.0
Naval facilities	594.0
Ports	300.0
National Guard headquarters	158.0
RSAF uniform	52.6
Ammunition	26.5
Pilot training	26.0
Shipsdesign	185.6
Trucks	25.3
Patrol gunboatsdesign	276.2
SA Army ordnance management assistance	223.3
Cement plant	235.0 ¹
Total	\$5,408.5
Hardware	869.6
Construction, training	\$4,538.9

TABLE 14 -- Continued

Notifications dated September 1	Millions
Missiles	25.0
Naval training center equipment	130.0
Missiles	30.0
RSAF headquarters construction	160.0
Family housing construction at air base	88.0
Armored personnel carriers	10.0
Aircraft	23.3
Guns	12.4
Missiles/launcher	7.9
National Guard modernization, training	215.0
Total	\$ 701.6
Hardware	238.6
Construction, training	\$ 463.0
1976 total to date, Government to Government	\$6,110.1
1976 commercial sale of Hawk missiles	1,400.0
Total 1976	\$7,510.1

The figures are conservative because the Administration was not required to report to Congress government-to-government sales smaller than 25 million prior to June 30, 1976, and smaller than 7 million following that date. In addition, there was no requirement for reporting commercial sales prior to June 30, and there is now a \$25 million floor on reporting such transactions.

Source: U.S. Congress. United States Senate. Committee on Foreign Relations. <u>U.S. Arms Sales Policy</u>. Hearings, 94th Congress, 2nd Session, 1976. Washington: Government Printing Office.

bu.S. Construction Assistance.

TABLE 15
ESTIMATED U.S. FMS TO SAUDI ARABIAN NAVY

Ships	Delivered	Ordered/Delivery
Landing craft	<u>-</u>	6
Minesweepers	4	4
Patrol boats	15	15
Rescue boats	2	deposit and the second
Harbor tugs	2	ecanolis medicas e
Other ships	-	26

TABLE 16
ESTIMATED FMS TO THE SAUDI ARABIAN AIR FORCE

Aircraft	Delivered	Ordered/Delivered
F-5 B trainer	20	-
F-5 E/F interceptor	40	60
C-130 transport	-	22
C-123 transport	6	
T-33 interceptor	12	12
AB-205 helicopter	24	
AB-206 helicopter	16	
KC-130 tankers	4	
Mirage Ves/DS (FR)	-	38
Alouette III fighter (FR) -	12
Jaquar fighter bomber (B	R) -	
Other aircraft	31	
	131	144

Missile System

Hawk	Maverick
Improved Hawk Mim 23B	Sidewinder
Rapier (BR)	Crotale (FR)
Redeye	Matra (FR)

Other Systems

ECM Equipment Communications Equipment Radar Systems

TABLE 17
ESTIMATED FMS TO THE SAUDI ARABIAN ARMY

60	atherovasom som
25	
	-
100	150
120	180
50	100
50	200
100	900
25	275
50	150
100	lada da e s trelada
80	18
150	300
	120 50 50 100 25 50 100

Missile Systems

Harpoon

SS-11

Hawk SAM

systems which have been completely delivered while the Order/Delivery columns contain total numbers of weapon systems on order and/or in the process of being delivered. Principle sources for the numbers include: Hearings before the Senate Foreign Relations Committee and the House of Representatives Committee on International Relations, H051 computer readouts located in the AF acquisition logistics division directorate of FMS to Saudi Arabia and selected articles from the Washington Post and New York Times since 1972.

Saudi Arabian Navy

By January 1972, the United States had agreed to assist the Saudis in expanding and modernizing their Navy by providing additional ships, construction of on-shore facilities and training. The DOD program, primarily the responsibility of the U.S. Navy, was designated the Royal Saudi Naval Expansion Program (SNEP) and essentially provided for a Saudi coastal defense with a Saudi capability to interdict unarmed commercial vessels in the Red Sea, Persian Gulf and Arabian Sea by 1981 (40:2-3). Indeed by 1976, the Saudis had ordered from the U.S. an estimated 50 ships to include six landing craft, four minesweepers, 15 patrol craft and 26 smaller boats and craft at a cost of over \$450 million (37:50-51). The SNEP also provided for U.S. support in the planning, design, and construction

of two Saudi Naval facilities. One facility to be located at Jiddha, is designed to provide for the Saudi Naval West Flotilla Force operating in the Red Sea. The current working estimates for construction of the facility are in excess of \$541 million and are divided as follows:

Mobilization	21,279,720
Off-shore facilities	142,780,000
Landfill land expansion	
and fencing	27,653,000
On-shore	350,000,000
Total	541,713,000

The second naval facility presently in the design stage is in the Persian Gulf. The proposed site is Jubail Harbor approximately 80 km north of Dhahran situated along the western coastline of the Arabian Gulf. The primary mission of the Jubail naval base facilities is to provide berthing and supplies for the Saudi Naval East Flotilla Force operating in the Arabian Gulf. The major activities of the naval base have been proposed to be the operation, service, maintenance and repair of ships in addition to providing berthing facilities for visiting naval, commercial, and supply ships. The naval station has been designed to have the capability to provide temporary services for ships in port and has provisions for fueling, loading of supplies and the disposal of sewage and contaminated fuels. In addition, major ship repair equipment to include repair piers and dry docking berths are available (37:50-51; 40:2-3; 43:148; 41:229-255).

Saudi Arabian Army

The greatest percentage of U.S. foreign military sales to Saudi Arabia is directed towards the Saudi Army and its related components the Saudi Arabian National Guard and the Saudi Ordnance Corps. With estimated purchases of over 50 million in FY 1971 and 300 million in FY 1973, total cumulative purchases for the FY 1975 was in excess of 1.3 billion dollars (41:229-255). However, pursuant to an agreement between the United States and Saudi Arabia, a new reporting procedure was implemented. This procedure called for inclusion of construction projects undertaken by U.S. Army Corps of Engineers in Saudi Arabia into U.S. foreign military sales totals (44:186). The addition of construction funds to Army weapons and equipment increases Saudi Army purchases in FY 1975 to over \$5.5 billion and swells them in FY 1976 to an amount in excess of \$8 billion (37:47,83).

There have been a number of important U.S. military sales to the Army since 1973. These sales are depicted in Table 17 and include:

1. 100 M-113 armored personnel carriers (APCs).

Capable of carrying 13 men in amphibious operations, the

APC has a 50 caliber machine gun and a road speed of about

40 miles per hour. Variants include mountings for anti
tank missiles, mortars and flame throwers (19; 29:13).

- 2. 2800-3000 TOW antitank missiles. TOW, an acronym for "tube launched, optically tracked, wire guided" missile has been modified by the United States for either surface-to-surface or air-to-surface missions. The missile can be used on both the U.S. M-113 APC or U.S. Agusta-Bell 205 and 206 helicopters. The missile is hand fired at a target while the operator keeps both the missile and the target aligned by cross-hairs on a highly magnified optical sight. An electronic guidance computer sends steering commands automatically through the wire to the missile. The TOW helicopter system is operated from an optical sight mounted in the operator's helmet while mounted in a gyrostabilized platform (19; 44:82).
- 3. 250 M-60 tanks. The M-60 is currently the main battle tank of the U.S. Army. Characteristics of the M-60 include a road speed 30 miles per hour, 105 mm high velocity gun, amphibious capability to about 13 feet and night vision equipment (19; 29:12).
- 4. 25 M-47 tanks. The M-47 is a lighter tank possessing more mobility and greater mechanical reliability than the M-60. It has a road speed of 25 miles per hour but has a basic weakness in restricted radius of action and no night visual capability (19; 29:12).
- 5. 1000 V-150 commando armored cars. The V-150 was selected as the vehicle for the modernized Saudi battalions. Basically a four wheeled, all wheel drive,

enclosed armored hull, the V-150 is capable of nine configurations designed to meet the Saudi Arabian desert environment. Configurations include a command vehicle armored personnel carrier, 81 mm mortar vehicle, twin machine gun turret vehicle, 20 mm turret vehicle, Oerlicon Model 204G automatic canon, 90 mm turret vehicle, Mecar 90 mm cannon and a recovery vehicle. The V-150 has an average operating range of 300 miles over various terrain while operation and maintenance costs are less than one-fifth of comparable tracked vehicles (19; 28:1-32).

Saudi Arabian National Guard Program (SANG). As previously mentioned, the primary missions of the Saudi National Guard is to protect public and private institutions and facilities in the Kingdom, to keep public order, to maintain security, and to assist the regular armed forces in countering threats. U.S. FMS is directly contributing to the achievement of those objectives through the SANG modernization program (28:2-4; 41:72).

In December 1972, the U.S. agreed to a SANG modernization program and in the ensuing 19 March 1973

Memorandum of Understanding, the U.S. undertook to provide

(a) defense equipment and services, (b) design and construction of facilities, installation and support elements; and (c) training and development, installation and initial

operation of communications, logistics and maintenance systems. Specifically, the Memorandum of Understanding committed the United States to organize, train and equip four mechanized infantry battalions and one battalion of light artillery over a four-year period (28:2-4; 41:72). The major U.S. equipment items in support of the program include:

- 413 commando cars (armored) V-150
 - 29 TOW missile launchers
- 1224 TOW missiles
 - 30 Valcan 20 mm guns
 - 22 105 howitzers
 - 40 81 mm mortars
- 333 50 cal machine guns (28:26)

The training of the National Guard under the SANG Memorandum of Understanding was accomplished by a U.S. contractor, Vinnell Corporation of Alhambra, California, under a cost plus award fee. The contract was for three years and specified the following tasks (28:18-26; 45:187-199):

- 1. Establish, manage, administer, and operate a military training center for advanced individual training, basic unit training and advanced unit training to include range firing and tactical exercises.
- 2. Establish, equip, manage and operate a logistic activity to support the units being modernized to include job training and counterpart training. The Statement of Work includes specific requirements for Training,

Logistics, Procurement, Program Support and Plans, Doctrine and Systems as depicted in Figure 6.

The overall Vinnell contract calls for equipping and training four mechanized infantry battalions and one light field artillery battalion at Khasm-al-ain training camp 15 miles east of the capital of Rijadh. Troop strength will consist of approximately 3600 SANG troops; 3000 mechanized infantry and 600 field artillery (105 mm howitzers (28:18-26; 44:187-199).

The total cost of the contract at award was \$76,963,931 and divided as follows:

Target cost	\$55,847,559
Base fee	763,318
Fixed fee	3,040,391
Award fee	2,131,291
Above target cost	13,181,559
Program reinbursement	2,000,000
	\$76,963,931

The Vinnell contract was important for two reasons. First, it represented the first contract ever awarded to a private American company to train a foreign army; and second, the contract was the first ever awarded to a service-oriented company with no product line (81:187-199).

Authorized expenditures for the SANG modernization which were initially \$335 million have increased to approximately \$400 million. Original cost estimates and data available through 30 June 1975 are presented in Table 18.

The high cost growth of the SANG program was due to high cost inflation faccors in (1) ammunition, and

TRAINING

LANGUAGE/LITERACY

REFRESHER COURSES

ADVANCED INDIVIDUAL TRAINING

UNIT TRAINING

ON-THE-JOB TRAINING

LOGISTICS

ORGANIZATIONAL (COMPANY & BATTALION

SUP & MAINT)

DIRECT SUPPORT/GENERAL SUP SUPPLY

& MAINT

ASSIST RECEIPT & PROCESSING OF EQUIP

AT PORT FACILITIES, DAMMAM

PROCUREMENT

PURCHASE OF SUPPLIES TO SUPPORT THE

MODERNIZATION PROGRAM

PROGRAM SUPPORT

MAINT OF PROGRAM FACILITIES & EQUIP

PRINTING AND REPRODUCTION

COMMUNICATIONS

PLANS, DOCTRINE,

DEVELOPMENT OF FUTURE AREAS FOR

& SYSTEMS MODERNIZATION

Fig. 6. Principal Tasks of Vinnell Corporation

Sources: (1) Smith, Colonel James D., USA.
"Saudi Arabian National Guard Modernization Through U.S.
Army Project Management." Unpublished research report,
unnumbered, Army War College, Carlisle Barracks, Pennsylvania, 1975, pp. 18-26. (2) U.S. Defense Security Assistance Agency. Military Assistance and Sales Manual. DOD
Manual 5105.38-M. Washington: Government Printing Office,
1974, pp. 187-199.

TABLE 18
SUMMARY OF SANG FINANCIAL ESTIMATES
(in millions of dollars)

	1973 Planning Estimate	Current FMS Case Estimate	Total Increase Planning Estimate 30 June 1975
Construction	63.00	111.70	+48.70
Training	104.72	195.66	+90.94
Equipment	114.97	106.50	- 8.47
Ammo	40.77	59.26	+18.49
PMO/Misc	11.87	15.71	+ 3.84
Contingency	0	10.00	+10.00
	335.33	387.13	163.80

Source: Smith, Colonel James D., USA. "Saudi Arabian National Guard Modernization Through U.S. Army Project Management." Unpublished research report, unnumbered, Army War College, Carlisle Barracks, Pennsylvania, 1975, p. 18.

(2) sole source direction of the major contractors during the life of the program (28:19; 41:187-199).

Saudi Ordance Corps Program (SOCP). The SOCP consists primarily of the purchase of U.S. Army trucks, training and maintenance and a spare parts supply system. SOCP began in 1966 involving the sale of 4200 tactical and general purpose vehicles, limited small arms maintenance and the establishment of a modern logistics system. The U.S. Corps of Engineers managed the SOCP program from 1966-1971 during which time the program cost \$150 million. Since November, 1972, the Saudis have been responsible for the program although the Corps of Engineers continued

to assist in management and Bendix, a civilian contractor, performed the training and maintenance service. Total cost for the 1972-1976 period was \$265 million (40:54).

Saudi Arabian Air Force (SAAF)

The United States is modernizing the Saudi Air Force principally through the FMS program Peace Hawk.

Project Peace Hawk. Peace Hawk is the name of a project that will enable Saudi Arabia to modernize the RSAF by the purchase of U.S. Northrop F-5 series aircraft and to become self-sufficient in their operation and maintenance. At Saudi Arabia's request the project is on a governmentto-government basis using FMS channels and using dependable undertaking as a basis of payment (17:12,14). Peace Hawk was originally set up in three phases: Phases I and II for the purchase of F-5B training aircraft and F-5E fighters; Phase III was for the support of these aircraft (10:30-31). In 1972 the U.S. suggested to Saudi Arabia that Peace Hawk be extended and Saudi Arabia accepted the offer. This brought up Phase III extension, IV, V, and VI. Phases III extension and V were for continued support and Phases IV and VI were for more F-5E fighter aircraft buys (17:14-15).

1. Peace Hawk Phase I. Peace Hawk Phase I was initiated by Saudi Arabia in 1970 with the Letter of

Offer (LOA) from the United States being accepted and signed by Prince Sultan Bin Abdul of Saudi Arabia on 28 July 1971. Phase I called for the purchase by Saudi Arabia of 20 F-5B training aircraft (that can also be used in an attack role if needed) and support in the area of Aerospace Ground Support Equipment (AGE), spare parts, Technical Orders (TOs), Mobile Training Sections (MTS), and five years of contractor technical support by Northrop. The total cost was \$42.3 million (17:14).

The F-5B was used to replace the T-33/F-86s being used in the Operational Conversion Unit (OCU) program at Dhahran RSAFB. The OCU is a unit that trains the graduates of King Faisal Air Academy in the fighter series aircraft. The contract called for 15 F-5Bs to be stationed at Dhahran RSAFB, and 5 at Taif RSAFB (17:12-13). The first aircraft arrived at Dhahran RSAFB in October, 1972, and the last aircraft arrived early in 1973 (10:57).

2. Peace Hawk Phase II. The LOA for Phase II was signed by Prince Sulton Bin Abdul Aziz on 29 September 1971. The original LOA called for the purchase of 30 F-5E aircraft and support in the area of AGE, TOs, spares, MTS, and two years of contractor technical support by Northrop. The total cost for Phase II on the original LOA was \$106.7 million U.S. dollars (17:15). However, because of changes the Saudi Arabian government requested after production

the F-5E had begun the cost went up to \$128.4 million.

These changes made these aircraft country-peculiar aircraft and also resulted in having to have the aircraft flight tested to check the Inertial Navigation System (INS), the Inflight Refueling System (IFR) and the Instrument Landing System (ILS) prior to delivery (10:58-59; 17:16-17).

Phase II called for the deployment of 20 F-5Es at Taif RSAFB and 10 F-5Es at Dhahran. The first aircraft delivery date was scheduled for October, 1973, but because of the changes requested to the aircraft the actual delivery date for the first aircraft was February, 1974, with delivery being completed in late 1974 (10:59; 17:16).

3. Peace Hawk Phase III. Phase III developed into an extensive plan to accomplish the introduction, operation, and support of the F-5B/E aircraft into the RSAF (17:18). In October and September, 1971, a U.S. team visited Saudi Arabia to assess the total support requirements of the F-5 program at Dhahran and Taif RSAFBs. They found extensive support augmentation and training requirements were needed to insure the success of the F-5 program (10:59). The United States presented one primary and three alternate training plans to Saudi Arabia. The plan the Saudi Arabian government wanted was close to the third alternate plan and called for the United States, through the FMS program, to provide the maintenance, training and support

requirements for the F-5 aircraft. Saudi Arabia further specified that Northrop Corporation be designated as sole contractor. On 4 April 1972, the LOA was signed by Prince Sultan Bin Abdul Aziz that called for support of the F-5 program costing \$137.5 million and was to run until 15 August 1975 (17:18-26).

Northrop Corporation as the sole contractor was responsible for all aspects of the program. San Antonio Air Material Area (SAAMA), now San Antonio Air Logistics Center (SA-ALC), was given the responsibility to issue the contracts and provide for program management (17:73). program was comprised of eight areas (10:21-27) that provided for the RSAF to become self-sustaining in the operations, maintenance, and logistics support of the F-5 aircraft purchased under Phases I and II. The program also called for modernization of Dhahran and Taif RSAFB for operations, maintenance, and training (see Table 19 for the summary of the 3 May 1972 Statement of Work from Northrop Corporation). All procedures and systems became the property of RSAF upon completion of the contractual effort. Facilities and equipment became the property of RSAF with completion of construction or delivery in-country. Northrop had full right-of-use of such facilities and equipment on a rent-free basis during the period of contractor performance (17:72-74).

TABLE 19

A SUMMARY OF THE 3 MAY 1972 STATEMENT OF WORK OF NORTHROP CORPORATION FOR PHASE III

Northrop Corporation will provide:

- 1. Manpower, equipment and facilities for performance of organizational and intermediate level maintenance and logistics support so RSAF could operate and maintain the F-5B/E aircraft, components and associated AGE.
- Contractor technical team to perform technical training in F-5B/E organizational and intermediate maintenance/ aircrew familiarization and RSAF instructor development.
- 3. F-5 Pilot Training Team (PTT).
- Special purpose vehicles and their servicing, maintenance, repair and log support.
- 5. Design and construct/modification of facilities for aircraft and component maintenance, engine repair, AGE maintenance, and ground/classroom training to augment or make existing facilities suitable to support the specific organizational and intermediate level maintenance for F-5.
- Design and construct permanent-type facilities required by RSAF.
- Servicing and maintenance of vehicles provided by contractor.
- 8. Personnel support service, including furnishing and supplies, for Northrop personnel and RSAF personnel.
- 9. English language training for maintenance and pilots.

Source: Leahy, Captain James T., USAF, and Captain Haskell I. Lynne, Jr., Captain, USAF. "Project Peace Hawk--A Case Study in the Management of a Foreign Military Sale." Unpublished master's thesis, SLSR 38-74B, AFIT/SL, Wright-Patterson AFB, OH, 1974, pp. 26-27.

A six-month extension of Phase III (15 August 1975-15 February 1976) was approved and signed by the Saudi Minister of Defense and Aviation (MODA) on 29 July 1975. The requirement for this extension was because the Saudi Arabian Government had not decided what to have in the Phase V program that was supposed to start immediately after the Phase III. The cost for this extension was \$116.4 million for contractor technical services and facilities and an additional \$775,000 (a 2 percent surcharge) for USAF contract administration. The contract provided for continuation of Peace Hawk III support in increased amounts, additional funds for services required for orderly transition to Phase V including long-term procurement of equipment and materials and long-term leasing requirements for Phase V. An additional change to the extension was made on 1 December 1975 to provide for a long lead time development work on a computer to be implemented under Phase V (10: 89-94).

4. Peace Hawk Phase IV. An LOA was presented to the Saudi Government in December, 1975, and was signed by the MODA, Prince Sultan Bin Abdul Aziz, on 4 January 1975. The approximate cost was \$769 million. This program called for the sale of 40 F-5Es, 20 F-5Fs, two simulators and various other aircraft improvements and support (see Table 20 for the items required by the LOA). Again, due to the

TABLE 20

ITEMS CALLED FOR BY LOA FOR PHASE IV

- 1. 40 F-5Es, 20 F-5Fs with RSAF options.
- 2. 2 simulators
- 10 F-5 reconnaissance nose kits between F-5E/F
- 4. 2 MTS
- Common/peculiar support equipment and initial spares for 4 main operating bases
- 6. Contractor technical support
- 7. 4 Weapons Systems Logistics Officers
- 8. C-5 delivery
- 9. AFSC/AFLC travel
- Improvements package
- 11. Automatic test equipment

Source: Drury, Captain Harry T., III, USAF, and Captain Peter J. Glenboski, Jr., USAF. "Peace Hawk: A Case Study of a Foreign Military Sales Program and Its Management." Unpublished master's thesis, LSSR 17-77A, AFIT/SL, Wright-Patterson AFB, OH, 1977, p. 9.

Saudi Arabian government request, contract changes caused delays and the first aircraft were not ready for delivery until September, 1976, a four-month slippage. The scheduled completion date for Phase IV is in December, 1978. The aircraft were to be delivered between three bases, Taif, Dhahran and Khamis Mushayt RSAFBs (10:95-108).

- 5. Peace Hawk Phase V. The LOA for Phase V was signed by Sultan Bin Abdul Aziz on 22 February 1976. Total cost for contractor services were not to exceed \$1,543.1 million and administration charges of \$30,863,220 U.S. dollars. The contract period extends from 15 February 1976 until 15 June 1979. Phase V can be subdivided into the following areas: the maintenance program, the logistics and logistics training program, operational support services, personnel support services, technical facilities construction, and housing construction (10:109).
- 6. Peace Hawk Phase VI. An initial LOA was presented to the Saudi Government in November, 1976. However, the Saudis rejected it due to changes in prices on aircraft and the LOA was not signed until 30 January 1970. It called for the procurement of four F-5F aircraft and their delivery at an unspecified amount. Delivery by C-5A was scheduled in the second quarter of 1978. No spares or support were included having been provided under Phase V (10:110).

Other Arms Sales to the SAAF

Significant among other U.S. sales to the Saudi
Air Force have been C-130 E/H hercules cargo aircraft,
KC-130 refueling tankers, supersonic-interception Hawk
SAM (surface-to-air missile), infra-red homing sidewinder
AAM (air-to-air missile) and electro-optically tracked
Maverick ASM (air-to-surface missile) (44:81-82).

The Saudis, realizing the effectiveness of the integrated air defense network in protecting both fixed sited and mobile targets as demonstrated by the Israelis in the 1973 October War, have apparently adopted a similar air defense system. They have taken delivery of Hawk SAM and Improved Hawk SAM as well as the British Thunderbird. In addition, the Saudis ordered the French Crotale SAM in December, 1974. The Crotale can be mounted on French AMX-30 tanks. The Saudis have also received the British Aircraft Corporation (BAC) Rapier which is useful in airfield defense. The combination of these missiles form a high-low mobile mix air defense system with a partial allweather, day-night capability. They are concentrated in a basic T along Saudi Arabia's northern borders and down through the center of the country, around key cities for maximum country defense (41:225-229; 44:81-83).

U.S. Military Construction to Saudi Arabia

The military construction program has been managed principally by the U.S. Corps of Engineers who virtually

manage every phase of a Saudi construction project. The Corps sets specifications, supervises contract performance and disburses money to contractors on satisfactory completion of work. Because of its good works in Saudi Arabia, a rapport has been developed between the Corps and the Saudi Arabian Government which contributes to the relationship between the government of the two countries (40:2-7; 43:148).

The U.S. Corps of Engineers has been involved in construction in Saudi Arabia ever since August, 1964, when the Corps was requested under Section 507(a) of the Foreign Assistance Act of 1961 to provide the necessary engineering and construction management services for designing and building of specific projects (principally military facilities agreed to by both the U.S. and Saudi Arabia). Construction projects undertaken or completed under the agreement, entitled "Treaties and other International Acts series No. 5830," includes five major programs at a total cost in excess of 8 billion dollars (40:2-7; 43:148).

Three programs, the SNEP, the SOCP, and the SANG, were previously discussed. The fourth program, the Communications Systems program, was a country-wide black and white television system completed in 1971 at a cost of approximately \$14 million. The fifth program, the Engineer Assistance (EAP) program, is the program of concern in this section. The EAP involves design and construction of a

three brigade-sized (7,500 troops) military contonments and the construction of port facilities at Al Mish'ab and Ribigh. The first cantonment at Khamis Mushayt, near the Yemen border was completed in 1971 at a cost of approximately \$80 million. The second contonment located at Tabuk, just south of the Jordanian border, was completed in 1973 at a cost of about 76 million. The third contonment at Al Batin south of the Kuwait border is a proposed military city of over 50,000 people, 20,000 troops and their families. It is expected to cost \$400 million and include brigade and battalion headquarters buildings, troop quarters, dining halls, a 400 bed hospital, firing ranges, dependent schools, and community and recreation facilities (40:2-7; 43:148).

The port facilities at Al Mish-ab and Rabigh to include planning and design will cost an estimated \$300 million. The Al Mish-ab facility will provide seven general cargo berths, one bulk cement berth, storage and port control areas, personnel support buildings and 150 units for family housing. The facilities of Rabigh while still under study are expected to be of equal magnitude. Both facilities are designed to relieve Saudi Arabian port congestion which has been a major bottleneck to Saudi development (38:25).

Tables 21 and 22 are a summary of U.S. Corps of Engineers projects and total Corps of Engineer manpower commitment to Saudi Arabia.

Summary

Chapter V has provided the basic facts on U.S. FMS and military construction in Saudi Arabia. It has been demonstrated that the primitive and largely undeveloped Saudi armed forces are rapidly emerging into a modern and formidable fighting force through the U.S. foreign military sales program and the U.S. Corps of Engineers construction program. U.S. FMS are providing arms and equipment in such quantities that the Saudi Arabian military, largely unknown in the past, has and is being modernized into a substantial armed force. The magnitude of the Saudi military expansion and modernization programs has propelled Saudi Arabia into the number one consumer of U.S. defense articles.

Recognizing the broad and extensive role of the United States in the modernization and development of the Saudi military structure, Chapter VI will discuss the purpose and effects of U.S. FMS to Saudi Araboa.

TABLE 21

LIST OF PROJECTS IN SAUDI ARABIA THAT CORPS OF ENGINEERS HAS MANAGEMENT RESPONSIBILITY FOR DESIGN AND CONSTRUCTION, DECEMBER 1, 1975	CORPS OF ENGIN	EERS HAS MANAGE CEMBER 1, 1975	ement
Project and Location	Construction Started	Construction Completed	Construction Value (millions)
Completed Projects			
Airfield, Dhahran	1951	1957	\$ 43.0
Civil air terminal, Dhahran	1959	1961	
Air Force training factory, Various	1957	1962	9.0
TV system, Various	1964	1971	28.0
Radio studio factory, Riyadh	1969	1973	14.0
Ordnance Corps, Various	1967	1972	98.0
Military cantonment, Khamis Mushayt	1961	1971	80.0
Military cantonment, Tabuk	1969	1973	16.0
Executive office building, Riyadh	1973	1975	5.9
Total completed projects			\$ 358.9
Projects Under Construction			
Officers club, Riyadh	1974	•	\$ 12.7
Medical support factory, Various	1974	•	210.0
Cantonment additions, Khamis Mushayt	1975	•	5.2
Cantonment additions, Tabuk	1974	•	5.1
Naval facilities, Various	1974	1	466.8
Water wells, Al Batin	1975	1	9.3
National Guard factory, Khashm-al-Ain	1975	1	6.2
Emergency water supply, Jidda	1975	1	13.7
Total under construction			\$ 729.0

TABLE 21--Continued

Project and Location	Construction Construction Started Completed	Construction Completed	Construction Value (millions)
Projects Under Design			
Medical support factor, Various	•	•	\$ 30
Cantanment additions, Khamis Mushayt	•	•	175
Cantonment additions, Tabuk	•	•	110
Naval facilities, Various	•	•	735
Military cantonment, Al Batin	•	•	3,250
Officer club addition, Riyadh	1	•	2
Operations center, Riyadh	•	•	S
National Guard factory, Various	•	•	265
Military academy, Riyadh	•	•	009
Airborne school, Tabuk	ı	•	35
Hospital facilities, Various	•		930
Air Force headquarters, Riyadh		•	30
Total under design			\$6,171
Projects Authorized (not yet under design)			
Military schools, Various	•		Unknown
Cantonment additions, Khamis Mushayt	•		Unknown
S	•		Unknown
Air Force College, Unknown	1		Unknown

Note: The Corps of Engineers is supporting the U.S. Air Force in management of rently supporting the Saudi Arabian Army Ordnance Corps under a FMS case that started design and construction of the Peace Hawk V program. The Corps of Engineers is cur-Total value of the case is \$132,900,000. in 1972 and expires in November, 1976.

Affairs. Hearings on Proposed Foreign Military Sales to Middle Eastern Countries-1976. Washington: Government Printing Office, p. 75. Source: U.S. Congress. House of Representatives. Committee on Foreign

TABLE 22

CORPS OF ENGINEERS MANPOWER COMMITMENT TO SAUDI ARABIA

Date	Corps of Engineers Personnel Located in Saudi Arabia	Corps of Engineers Personnel Located Outside of Saudi Arabia	Total Corps of Engineers Personnel Commitment	Percent of total Corps of Engineers Work Force
June 1972	87	173	260	9.0
June 1973	93	187	280	.7
June 1974	66	196	295	.7
June 1975	147	223	320	6.
Present (September	1915) 161	244	405	1.0
June 1976	490	240	730	1.8
June 1977	650	200	850	2.1
June 1978	675	200	875	2.2
June 1979	675	190	865	2.2
June 1980	675	190	865	2.2

Note: Personnel projections are current estimates and may fluctuate based on program execution.

tions. Foreign Assistance Authorization -- Arms Sales Issues. Hearings, 94th Congress, 1st Session, 1975. Washington: Government Printing Office, 1976, p. 147. Source: U.S. Congress. United States Senate. Committee on Foreign Rela-

CHAPTER VI

THE PURPOSE AND EFFECTS OF U.S. FMS TO SAUDI ARABIA

Introduction

The fundamental reason for security assistance and military sales is found in American history and the growing realization that, in the Twentieth Century, the United States should not isolate itself from the mainstream of major forces and events abroad (26; 43:120; 52:12). This fundamental reason for FMS is supported by former Secretary of Defense James E. Schlesinger:

It is the principle purpose of the military sales programs to strengthen deterrence and promote peaceful negotiations by helping our friends and allies maintain adequate defense forces of their own. We believe that hostilities can often be avoided altogether, and when they cannot, we seek to ensure that our friends and allies have the capacity to defend themselves and restore stability as soon as practical. In this way, we seek to achieve regional stability in crucial areas of the world without the need for direct intervention [13:5].

It must be recognized, however, that the U.S.

FMS relationship with Saudi Arabia cannot be practically separated from the U.S. diplomatic, political and economic and cultural relationship with the Saudis. The United States cannot: cooperate and pursue friendly relations politically, or play a role in the Saudi plans for

development and diversification economically, or cooperate in building educational resource bases in technological and other fields culturally, and at the same time divorce the defense-related aspect of its foreign policy. According to the State Department, FMS are an element of foreign policy and are neither more nor less subject to uncertainties than any other tool of policy. The basic issue is to make the best possible systematic judgement for total U.S. interests while being careful not to forego the promise of substantial benefits at acceptable costs and risks of FMS (43:121).

The interdependence of the political, economic and military purposes of FMS is demonstrated in the statement by Alfred L. Atherton, Jr., Assistant Secretary of State for Near Eastern and South Asian affairs in his defense of the U.S. FMS relationship to Saudi Arabia:

Saudi Arabia is important in our (U.S.) search for peace in the Middle East, to our concern for the security of the Persian Gulf and to the world's economic health. . . . Foreign military sales are an essential part and parcel of the overall relationship [36:8].

It is the purpose of this chapter to investigate the validity of selected economic, military and political considerations used by the United States in approving or disapproving arms sales to Saudi Arabia. By such an investigation, the criteria which most influence U.S. FMS should be revealed and a net assessment of U.S. FMS as an

element of the U.S. overall relationship with Saudi Arabia can be accomplished.

Purpose of U.S. FMS

According to A Report to Congress on Arms Transfer

Policy Pursuant to Sections 202(b) and 218 of the International Security Assistance and Arms Export Control Act

of 1976 arms transfers are used as a major instrument of
United States foreign policy and for the following purposes:

- 1. To support diplomatic efforts to resolve major regional conflicts by maintaining local balances and enhancing U.S. access and influence vis-a-vis the parties.
- To influence the political orientation of nations which control strategic resources.
- 3. To help maintain regional balances among nations important to us in order to avert war or political shifts away from us.
- 4. To enhance the quality and commonality of the capabilities of major allies participating with us in joint defense arrangements.
- 5. To promote self-sufficiency in deterrence and defense as a stabilizing factor in itself and as a means of reducing the level and automaticity of possible American involvement.
- 6. To strengthen the internal security and stability of recipients.

- 7. To limit Soviet influence and maintain the balance in conventional arms.
- 8. To enhance the U.S. general access to and influence with governments and military elites whose political orientation counts for us on global or regional issues.
- 9. To provide leverage and influence with individual governments on specific issues of immediate concern to the U.S.
- 10. To secure base rights, overseas facilities and transit rights to support the deployment and operations of the U.S. forces and intelligence systems.

Generally, U.S. arms sales have been approved under the guise of these broad purposes (52:17-18). By and large, however, the U.S. has during the period 1972-1976 pursued a policy of selective restraint in the transfer of conventional arms through a combination of (1) executive branch decisions, based on a balancing of potential benefits and risks, and (2) restrictions imposed by Congress (52:1-2). Considerations which have dictated restraint have been based on concern that arms transfers might:

- 1. Contribute to an arms race.
- 2. Lead to an outbreak or escalation of conflict.
- 3. Decrease the likelihood of conflict resolution.

- 4. Interfere with local economic or social development.
- 5. Lead to later use against the U.S. or its allies.
- 6. Make advanced firepower available to terrorists.
 - 7. Jeopardize a U.S. technological lead.
 - Lead to adverse political reactions.

In making decisions concerning arms transfers, the Executive Branch of the United States Government also takes into account a wide variety of additional political, military and economic considerations. These considerations, often representing conflicting interests, must be balanced in terms of relative impact on foreign policy and U.S. national security (52:17-18).

The political considerations assessed are:

- The role a country plays in its environment, the common interests it has with the U.S. and possible points of divergence.
- Whether the transactions further U.S. objectives more on a balance than other economic or political measures.
- 3. The position of influence that sales might help support including potential restraint that can be applied in conflict situations.

- 4. The current internal stability of the country, its capacity to maintain that stability and its attitude towards human rights.
- 5. The disadvantages of not selling to a country or government with which we enjoy good relations.
- 6. The options available to a country. Will a refusal result in the country turning to other sources of supply? What sources? What will be the political military and economic implications of this? By refusing to sell, might we forfeit opportunities of maintaining a close relationship that could better enable us to develop or maintain parallel interests and objectives?

The economic considerations assessed are:

- 1. Is the proposed sale consistent with Saudi Arabia's development goals?
- 2. Will the sale strain a country's ability to manage its debt obligation or entail operations and maintenance costs that might make excessive claims on future budgets?

The military considerations assessed are:

1. The threat the military capability is supposed to counter or deter, whether we agree on the nature of the threat and how it relates to our own security. During the period when the United States and some other powers are transferring some security responsibilities, the U.S. must attempt to understand the security concerns of the

smaller nations. To the U.S. their concerns may seem exaggerated but to them their concerns are usually very real.

- 2. How the proposed transfer affects the military balance, regional military tensions or the military buildup plans of a country.
- 3. Whether the country has the capability to absorb and utilize the arms effectively.
- 4. What other military interests would be supported by the transaction.
- 5. The impact on U.S. readiness. The impact of sales on the readiness posture of our own forces.
- 6. Whether a substantial physical dependence on U.S. sources of supply would enable us to better control conflict under some circumstances.

United States Foreign Military Sales to Saudi Arabia--The MilitaryPolitical Dimension

United States FMS and Saudi Military Development

U.S. FMS to Saudi Arabia as demonstrated in Chapter V have expanded dramatically since 1970 contributing significantly to an increased Saudi military capability and visibility in the Middle East. Indeed, a Saudi military posture, previously predicated on three specific goals of (1) access to the most fundamental and basic concepts of

military organization, (2) construction of military housing and training areas, and (3) purchase of trucks and vehicles, has given way to a military posture founded on the over 100 specific goals espoused in the joint U.S.-Saudi Commission on Security Cooperation. At present, the Saudi military is supplied and supported principally through U.S. FMS.

U.S. FMS have essentially transformed each arm of the Saudi military into a modern equipped, highly trained viable military force capable of (1) responding to strategic threats, (2) deterring internal insurrections, and (3) exerting influence in the Middle East's search for peace.

U.S. FMS have virtually created the Saudi Air

Force by supplying both F-5 aircraft and logistical support. U.S. FMS of F-5s have not only doubled the size of the Saudi Air Force but have additionally increased the capability. Prior to the Peace Hawk program, the Saudi Air Force consisted of antiquated U.S. training aircraft. However, with Peace Hawk, the Saudis obtained F-5 aircraft that were both modern and capable of modifications designed to accommodate Maverick surface-to-air missiles, TOW anti-tank missiles and Sidewinder AIM-9J air-to-air missiles. As a result, Saudi Arabia has developed a highly respectable air force with substantial defensive strength. According to James R. Kurth,

- . . . the combination of the F-5 and the missile weapons systems effectively converts the F-5 aircraft into a "B-5," a bomber system that combines high accuracy with low vulnerability and produces a formidable offensive system (rather than a defensive system) unprecedented in past U.S. FMS to Saudi Arabia [44:81].
- U.S. FMS have essentially changed the role of the Saudi Army enabling the Saudis to accommodate either a defensive or offensive posture. U.S. FMS of U.S. Army M60 tanks, V150 armored cars and AB205 and AB206 helicopters have tripled the Saudi ground force capabilities. A viable Saudi Army, considered necessary because of the (1) past Saudi border disputes, (2) past history of Saudi insurrections, and (3) vast Saudi terrain, has evolved through U.S. FMS and now appears sufficient to repel plausible military threats from South Yemen and Iraq (39:711).
- U.S. FMS to the Saudi Navy are helping the Saudis to develop the second largest Navy in the Persian Gulf.

 U.S. FMS of patrol craft and small ships, while relatively small in comparison to other Middle East countries, have increased the Saudi capability to defend the vast Saudi shortline and to protect Saudi oil tankers within the Persian Gulf-Red Sea area.

The long-range effect of U.S. FMS to Saudi Arabia is the establishment of a Saudi military capability that by 1980-1981 will possess the generic skill and generic infrastructure capable of supporting incremental weapons

of non-U.S. origin. Saudi Arabia has been acquiring far more than an inventory of weapons systems and the corresponding amount of accelerated crew training and initial logistics which usually complement the transfer of the advanced weapons to backward countries. They are receiving:

(1) a full range of basic military infrastructure to include naval port facilities, air fields, army barracks and officer housing, (2) training far in excess of the normal scope commonly given by weapon suppliers to include weapon and support training, operation of logistic management systems, maintenance and repair of all inventory items, plus military administration and command, and (3) logistics support that is exceptionally thorough and realistic (37:711).

U.S. FMS is supporting the development of a generic military capability for the Saudis for two reasons. The first reason is to promote Saudi self-sufficiency by lessening Saudi dependence on U.S. sales programs. At the conclusion of the various U.S. FMS programs, the Saudis will have the ability to effectively increase their military capabilities from a number of suppliers. The Saudis will no longer be subject to the possibility of a U.S. suspension on the flow of military replacement ports and/or withdrawal of American military technicians and instructors. Additionally, the Saudis will no longer be subject to control militarily through supplier limitations on weapons flows. The second reason for U.S. support of a generic

military capability for the Saudis by 1980-1981 lies in the \$142 billion Saudi economic development plan. According to Saudi Planning Minister Isham Nazer, "we have three to six years to lessen our dependence on oil and diversify our economy before the world lessens its dependence on us." Military independence by 1980-1981 thereby refelects the broader Saudi philosophy of total economic independence by the early 1980s. U.S. FMS thereby supports not only the military development of Saudi Arabia but the entire economic development plan.

U.S. FMS and the Balance of Power

Arab-Israeli Conflict. According to official U.S. policy "the United States will remain faithful to our treaty obligations and will honor our historic responsibilities to assure the security of the State of Israel [52:1-2]." As a result, arms sales to Saudi Arabia are viewed within a framework of the overall effect on the Middle East balance (52:9-10)--an effect that is viewed by many as destabilizing.

According to Paul Kinsinger of the Brookings
Institute, U.S. FMS to Saudi Arabia are a "critical factor
which will inevitably draw Saudi Arabia into a future
Arab-Israeli war" producing extensive military destruction
to Saudi Arabia from which they may never recover (40:241).
Professor Alan Dowty of the University of Notre Dame

has asserted that U.S. FMS to Saudi Arabia has a serious impact on the Arab-Israeli conflict and a destabilizing influence in the entire Middle East region. Professor Dowty cites three reasons. First, the quantity and quality of arms that the U.S. is providing to Saudi Arabia are disproportionate to Saudi arms needs—that Saudi Arabia is increasingly becoming involved in the Arab-Israeli conflict through military support of Israeli's enemies. Second, the military purchases of Saudi Arabia parallel the military deficiencies of certain Arab confrontation states. Third, Saudi Arabia has become increasingly involved as a primary party in the Arab Israeli conflict.

On 1 September 1976, Rabbi Alexander Schindler on behalf of the Conference of Presidents of Major American Jewish Organizations representing thirty-two national organizations, stated concerning arms sales to Saudi Arabia:

The extent and type of weaponry . . . far exceed the defensive needs of that country and threaten seriously to upset the delicate arms balance in the Middle East. Moreover, the huge size and nature of the . . . arms sales pose the gravest peril to the security of Israel which is linked to closely to our own countries [U.S.] strategic interest [44:68].

Morris J. Amitay, Executive Director of the American Israeli Public Affairs Committee, concluded that U.S. FMS to Saudi Arabia "only fuels the fires of war in the Middle East and reinforces the drive of the Arab States to gain military superiority over Israel in any future war [44:69]."

Support for the destabilizing effects of U.S. FMS on the regional military balance of power can also be found within Saudi Arabia. King Khalid was recently questioned, "What additional purchases of United States and other military equipment do you plan? How do you like the U.S. military equipment you have acquired?" King Khalid replied:

When we build up one military strength we have no aims against anybody except those who took by force our land and shrines in Jerusalem . . . and we all know who that is. We also believe that the strength of Saudi Arabia is a strength for the whole Arab and Islamic world. We always intended to make use of all military equipment that might help build our military strength [44:72-74].

In addition to that statement Prince Sultan ben Abdul Aziz, Saudi Minister of Defense, declared in 1974, "that all we own are at the disposal of the Arab nation and will be used against our common enemy [37:25-26]."

Consequently, there are well-founded and well-supported contentions that U.S. FMS has produced a destabilizing influence of the balance of power in the Arab Israeli conflict.

Geoffrey Kemp in The Middle East and the International System addressed the "realities" of Saudi arms purchases and the regional effect of them on the balance of power. Mr. Kemp, in discounting the influence of U.S. FMS to Saudi Arabia on the Middle East balance, has suggested that:

1. The prospect of armed conflict between Israel and its neighbors (to include Saudi Arabia) remains high irrespective of the nature and magnitude of arms flow. Therefore, the effects of arms transfers... by themselves upon propensities for violence will be marginal.

2. The United States has become more deeply involved in the Arab-Israeli Conflict than at any time in the last twenty-five years. Therefore, the U.S. has more control of the relationship between arms and conflict in the context of the Arab-Israeli dispute than in the Persian Gulf and Saudi Arabian perspective [35:217].

Mr. Kemp's arguments discounting the influence of U.S. FMS to Saudi Arabia on the Middle East balance are supported by General Howard M. Fish. General Fish has stated that:

Along with our [U.S.] overall policy of keeping the balance in the area, the Israeli's are not standing static . . . they are getting appreciable new military capabilities . . . the sales [to Saudi Arabia] would not unbalance the current Israeli advantage [38:56].

The crux of the arguments for continued U.S. FMS to Saudi Arabia and their overall ineffect on the military balance of power can be discerned by the Congressional dialogue between General Fish and Representative Larry Winn, Jr., of Kansas.

Mr. Winn:

If all the Saudi tanks in the armament were sent to fight Israel would they make an appreciable difference on the balance of forces?

General Fish:

Absolutely not. No sir, they would not [38:41].

It appears that there are profound arguments on U.S. FMS to Saudi Arabia and whether or not they are a

stabilizing or destabilizing influence on the Balance of Power in the Middle East. The Arab-Israeli balance of force ratios attached in Table 23 shows that whereas Saudi Arabia's military visibility among all the Arab states is minimal, the possibility exists that a multi-lateral arms transfer program, similar to the program being supplied to Saudi Arabia, would dramatically alter the balance of military power.

The Persian Gulf States. U.S. FMS to Saudi Arabia and its effects on the military balance of power among the states in the Persian Gulf region is difficult to assess. Saudi Arabia and Iran have been latent rivals in the Persian Gulf in recent years with the dispute over Iran's exclusive claim to the Persian Gulf the focus of their sharpest disagreements. Although there exist common attitudes between Saudi Arabia and Iran which include a common anti-communist philosophy, a common religion—Muslin (differing only in religious sect) and a common determination to maintain a strong monarchy, the detente that exists has been a result of a mutual interest in the internal development of their respective military powers. Indeed, there is a distinct possibility that the rivalry between the two countries will increase in the future [35:200-212).

U.S. FMS to Saudi Arabia appears intent on offsetting the military advantages that had shifted in favor

TABLE 23

RATIO OF BALANCE OF MILITARY POWER AGAINST ISRAEL

		1975	1980 (Assuming full U.S. funding of \$1.5 billito Israel)	<pre>0 (Assuming full U.S. funding of \$1.5 billion to Israel)</pre>
	Confrontation States*	Confrontation States Plus Anticipated Contribution By States Outside Confrontation Area**	Confrontation States*	Confrontation States Plus Anticipated Contribution By States Outside Confrontation Area**
Combat Aircraft	2.8 to 1	3 to 1	3.2 to 1	3.8 to 1
Tanks	2.7 to 1	3 to 1	3 to 1	3.6 to 1
Artillery	6 to 1	9 to 1	8 to 1	9 to 1
Armed Forces (Divisions)	4 to 1	5 to 1	5 to 1	6 to 1
SAM atteries	10 to 1	12 to 1	18 to 1	20 to 1

*Egypt, Syria and Jordan.

**Egypt, Syria, Jordan, Iraq, Saudi Arabia, Kuwait, Libya, Algeria, Morocco, Sudan and Tunisia.

Committee of Appropriation. Foreign Assistance and Related Agencies Appropriation for 1978 Part 3. Hearings, 95th Congress, 1st Session, 1977. Washington: Government Printing Office, 1977, p. 725. Subcommittee of the Source: U.S. Congress. House of Representatives.

of Iran following Britain's departure. This emphasis on a "twin pillar" approach clearly threatens Iran's desire to be the principle arbiter of Gulf affairs and introduces elements which could further inhibit Saudi-Iranian military and political cooperation and trigger wide conflict in the area. Additionally, a failure to cooperate on fundamental issues would make the Persian Gulf more susceptible to subversion and conflict (35:78-79).

Although Saudi-Iranian cooperation has been minimal, there has been evidence that both countries are attempting to overcome their differences particularly towards ending tensions and increasing regional stability in the Red Sea-Indian Ocean area. For instance, Iran has withdrawn an estimated 3200 troops from Oman where in 1974-1976 they helped Sultan Quabus overcome a Marxist guerrilla offensive from South Yemen. Meanwhile, Saudi Arabia is wooing the radical South Yemen regime with financial aid, a big pipeline project and recent establishment of diplomatic relations. Saudi Arabia has also been attempting to initiate formal peace talks between Sultan Quabus and the South Yemenis. The Saudi aim, with complete Iranian approval, has been to get South Yemen to expel Cuban advisors and radical Palestinian guerrillas and terrorists opposed to a negotiated peace with Irrael. As a result, not only have tensions eased between Saudi Arabia and Iran but the

probability of superpower confrontation in the area has decreased (35:78-79).

The political divergence between Iraq and Iran poses another threat to regional stability and emphasizes the need for U.S. FMS to Saudi Arabia. Transformations of the Arabian Peninsula states (not to include Saudi Arabia) into an Iraqi style form of government would make Iranian intervention highly likely. This is a result of the Iranian perspective that the overthrow of a kingdom or sheikdom anywhere in the Gulf would be a threat to traditional rule throughout the area to include Iran. Should Iran intervene, the Shah would depend on Saudi Arabian military forces for quick "clean up" operations and a combined show of force (35:78-79).

There appears to be a decreasing likelihood for a Saudi Arabian, Iranian-Iraq confrontation. With Iranian approval, the Saudis are trying to: (1) bring Iraq into a system of collective security in the Gulf, (2) ease tensions between Syria and Iraq, (3) bring about resumption of suspended pumping of Iraqi oil through Syria to the Mediterranean and (4) find a solution to the Iraq-Kuwait boundary dispite (35:78-79).

There are many valid arguments on the destabilizing effects of U.S. FMS on the military balance of power in the Persian Gulf. Robert E. Hunter, Overseas Development Council, has perceived that U.S. FMS to Saudi Arabia

increases the feasibility of substantial military force in solving Persian Gulf conflicts due to Saudi inability to compete effectively in regional arms races by virtue of being constrained by a narrow population base and few trained personnel (35:78-79).

Dr. Mortechar Abir, professor of Middle Eastern studies, Hebrew University of Jerusalem, Israel, concurs with Mr. Hunter. Dr. Abir goes further in his analysis, however, having perceived that U.S. FMS to Saudi Arabia and Iran sharpen the rivalry and feuding between the two states for hegemony in the Gulf area and the Arabian peninsula. Iran's involvement in a military conflict in Dhofar, in the form of an expeditionary force stationed in Omani serves to intensify Saudi sensitivity to Iran's consolidation strength, and military activity in the region. Additionally, U.S. FMS to Saudi Arabia and Iran will provoke misgivings in Iraq, a country which is suspicious in light of the rising military power and influence of Saudi Arabia in the area. Lastly, the legitimacy of the borders has not been established by all of the Persian Gulf countries, particularly Saudi Arabia, and the growing amount of U.S. FMS may add to the danger of military clashes (40:256-259).

Representative Piere S. Dupont, admitting that U.S. FMS in the Persian Gulf area are designed to promote security, has felt that arms sales to Saudi Arabia may have the opposite effect and undermine security and disrupt the

military balance of power in the region. U.S. FMS, according to Dupont, is fueling an arms buildup which may produce instability in the area by promoting an arms race which raises the level of tension in the area. This tension plus availability of weapons creates greater potential for conflicts. Dupont stated that Saudi Arabia will not go to war unless it has the means to fight. By the U.S. supplying Saudi Arabia the means to fight, it has also created the will to fight (41:13-17).

The Question of Transferability. The question of Saudi Arabian transferability of U.S. arms and equipment has profound implications for U.S. FMS to Saudi Arabia and the present military balance of power in the Middle East. Critics contend that the United States FMS to Saudi Arabia are being transferred to confrontation states and are affecting the balance of forces in the Arab-Israeli conflict. Others contend that Saudi actions violate the U.S. FMS Act and an immediate termination of all arms and defense articles should be effected (44:61). There have also been those who have argued that Saudi arms transfers are not prohibited and have no effect on regional stability (40:2231).

According to the U.S. Foreign Military Sales Act, no defense articles can be sold unless the buyer-seller agreed (a) to not transfer title or possession to any

third party without prior U.S. consent and (b) not to use the articles for purposes other than those for which furnished. Specifically, the act states:

The country or international organization shall have agreed not to transfer title to or possession of any defense article so furnished to it or to anyone not an officer, employer or agent of that country or international organization and not to use or permit the use of such articles for purposes other than those for which furnished unless the consent of the President has been furst obtained [52:40-42].

Should an illegal transfer occur, the United States is obligated to terminate all military sales to the offending nation (52:40-42).

The Act prohibits the U.S. Government from selling articles other than for internal security, for legitimate self-defense or to permit the recipient to participate in regional or collective arrangements or measures consistent with the U.S. charter. The foregoing restrictions were made to Saudi Arabia by the U.S.-Saudi Arabian Mutual Defense Assistance Agreement dated June 18, 1951.

Two separate issues have spurred the controversy over U.S. FMS and arms transfers by Saudi Arabia. First, during the 1973 Yom Kippur War Saudi Arabia sent a 3000-man brigade to Jordan. The Saudi brigade as of December 31, 1976 was still in Jordan and the Saudis had not received U.S. permission to take or keep U.S.-supplied equipment in Jordan. The second issue involved an alleged Saudi transfer of Bell 205 Iroquois helicopters to Egypt during

the Yom Kippur War (38:92). As a result, U.S. FMS to Saudi Arabia is seen by critics as a source of weapons to the entire Arab world that has considerable impact on the balance of power in the Middle East (44:80-81).

Dr. James R. Kurth of Swarthmore College has stated that the major dangers of U.S. FMS to Saudi Arabia are:

(1) that Saudi Arabia will transfer American-supplied weapons to other Arab states for use in another Arab-Israeli War, and (2) that there is sufficient evidence that arms are being transferred despite U.S. prohibitions to make anyone cautious. Dr. Kurth has further stated that the U.S. FMS to Saudi Arabia coupled with Saudi Arabia's continuing hostility toward Israel has put Saudi Arabia in a position of becoming the weapon waystation or weapon warehouse of the Western World (44:80-81).

Dr. Kurth's concern over the transfer of U.S. FMS from Saudi Arabia to other Arab countries has been echoed by Morris J. Amitay, Executive Director of the American Israel Public Affairs Committee. Mr. Amitay stated:

That despite the prohibition of weapons (by the U.S.) to third countries there is no guarantee that such transfers will not be made. . . . Regardless of Saudi statements that U.S. arms are for their own defense, Saudi Arabia will be hard pressed to resist pressure by the Arab states to commit its well armed troops or transfer its weapons stockpiles in the event of a conflict. U.S. FMS therefore represent a serious threat to Israel's security and the regional balance of power [44:74].

Opinions by the Honorable James E. Akins, U.S. Ambassador to the Kingdom of Saudi Arabia, and General Howard Fish,

USAF, discount the grave concerns of Dr. Kurth and Mr. Amitay and the destabilizing effects of Saudi arms transfers. Ambassador Akins asserted that legally the stationing of a Saudi brigade with U.S.-supplied equipment in Jordan to assist Jordan in defending itself in the event of aggression against its territory would not in itself conflict with the 1951 U.S.-Saudi Arabian Mutual Defense Assistance Agreement. A violation would arise only in the event that a U.S.-equipped brigade engaged in activities not sanctioned by the agreement such as aggression against any other country or transferred U.S.-supplied equipment to a third party without prior consent of the U.S. Government. In the case of Saudi Arabia, neither situation has occurred (38:92). Additionally, General Howard Fish asserted that during the Yom Kippur War the true number of helicopters sent to Egypt were eight, and that the eight helicopters were sent only to temporarily operate in rearward areas of Egypt on logistics support mission. According to General Fish, the aircraft were flown exclusively by Saudi pilots, were not transferred to the Government of Egypt and were returned to Saudi Arabia after a few months (38:92).

Secretary of State Alfred L. Atherton concluded that the transfer of U.S. arms by Saudi Arabia, although a potentially dangerous trend, does little to effect the regional balances of power. As a result, concern over

unauthorized arms transfers by the Saudis to other Arab states is unjustified. According to Atherton there are two fundamental reasons why the Saudis are reluctant to engage in unauthorized arms transfers: (1) Saudi Arabia values its military supply relationship with the U.S. and does not wish to jeopardize this relationship and, very directly, their own security by irresponsible acts such as the transfer of weapons in violation of their agreement with the U.S.; (2) there are serious technical limitations to effective transfer of arms by the Saudis. Sophisticated and technologically complex weapon systems permit no substitution of components not specifically designed for them; and (3) there are serious physical limitations to arms The transfer of capability implies the necessity for supporting services, training and trained manpower and sources of supply--resources that are seriously lacking in Saudi Arabia (36:8).

Perhaps the question of transferability is best summarized by Geoffrey Kemp:

The transfer of advanced arms by the Saudis may not intensify conflict and in some circumstances may even help to deter it . . . however, large modern inventories of weapons will certainly influence the nature, scope and intensity of war [35:217].

U.S. FMS and Saudi Internal Security

U.S. FMS, although designed to augment Saudi military capability against external enemies, have overlapped

into the political structure of Saudi Arabia having provided King Khalid and the present ruling power the means of suppressing domestic opposition. The Saudi National Guard or "white army" have been the explicit internal security element in the Saudi armed forces. Their principle purpose was to control the civil population and offset the coup potential of the regular army. The United States has assumed the entire responsibility for training and equipping the Saudi National Guard and, as such, assume exclusive responsibility for the creation and the success of the organization. This identification with the SANG puts the U.S. in the position of strengthening and insuring the continuation of the present Saudi government. As a result, the U.S. has become increasingly involved in the domestic politics of Saudi Arabia.

In addition, U.S. FMS through accelerated training programs has weakened the traditionally strong Bedouin support of the Saudi monarchy by introducing the Bedouin into a modern military system complete with western ideas and lifestyles. The traditional leaders of the National Guard have been the Bedouin tribal sheeks. However, the Saudis apparently recognizing the educational and cultural inadequacies of the Bedouin and anxious to provide the best officer material to American advisors, have given U.S. advisors the power, with just cause, to remove the sheik and replace him with a better qualified individual. Also,

the advisors are allowed to develop a service record for Bedu soldiers for definition of a uniform pattern of achievement, recognition and promotion. Through these means of training and education, and ranking according to ability rather than status, and by introducing them to modern weapons, the U.S. is westernizing the Saudis and thereby uprooting their traditional support of the monarchy.

U.S. FMS is also destabilizing the balance between the SANG led by Prince Abdullah bin Abd al-Aziz and the regular military under the Ministry of Defense and Aviation or (MODA) led by Prince Sultan and Prince Sulki. These two forces, deliberately kept separate to effectively balance one against the other, are presently in an imbalance. U.S. FMS are strengthening the MODA to such a degree that the SANG will no longer be able to provide a counterweight to the armed forces. Therefore, U.S. FMS affect the internal mechanisms of political balance in Saudi Arabia creating potentially devastating political undercurrents.

United States Foreign Military Sales to Saudi Arabia--The Economic Dimension

According to Morris Janowitz in The Military and Political Development of New Nations, there are direct and indirect contributions to economic development by military modernization. First, the military serves as a training ground for technical and administrative skills, and second, the military manages economic enterprises to meet its own

requirements or for the needs for the civilian society.

Janowitz states that military development or modernization

particularly in underdeveloped countries, reflects a broader

desire to be economically independent (15:75-84).

- U.S. FMS in providing for Saudi military modernization supports the broad economic motivations espoused by Janowitz and facilitates economic development in Saudi Arabia.
- 1. U.S. FMS programs are directly contributing to the civilian economy, particularly in the areas of production and management by providing for the import of skills. Where almost 85 percent of the Saudi Arabian people are functionally illiterate, military training is effectively improving skill levels for future productivity in civilian occupations. This is particularly true in the case of the agriculturally self-sustaining Bedouin, who are, as a result of U.S. arms sales, provided with elements of general education as well as with rudimentary but important urban skills and attitudes (15:75-85).
- 2. U.S. FMS to Saudi Arabia is supplying dual use infrastructure. Shipping facilities at Rabigh, Al Mishab and Jubail, airports at Tait and Al Batin, and communications facilities at Dhahran, are but a few examples. The shipping facilities at Jubail have not only been planned to harbor the Saudi Navy in the Persian Gulf but have also been designed to provide loading facilities for Saudi oil

and to relieve the number one Saudi economic development problem at port congestion (40:266). Airports designed primarily for military purposes are being used by businessmen entering and traveling around Saudi Arabia in support of various oil interests, while military communications systems sold by the U.S. are also being used as an education medium (41:202).

- 3. U.S. FMS are producing within the Saudi military sector close substitutes for civilian goods and services (food, shelter, medical aid) and have reduced the burden on the civilian economy thereby permitting other Saudi investments. For example, at Al-Batin, schools, hospitals, and housing being built are providing not only essential military services but essential civilian functions such as public education, public health training and have effectively raised the standard of living of the military and civilian sector (22:21).
- 4. U.S. FMS to Saudi Arabia are supporting the modernization of attitudes, the opening of minds to new management and technical ideas and the promotion of fuller use of resources. Although principally manifested through the Saudi development of its oil resources, the modernization of attitudes has also been evident in the assimilation of logistic support plans which can no longer be supported by the traditional attitudes of "let the government do it" or "manual labor is beneath me." Considering the

limited Saudi manpower and the size and complexity of the Saudi military logistics system, the modernization of attitudes is essential for future Saudi economic development (49).

5. U.S. Foreign Military Sales programs have a positive effect on the Saudi Arabian growth rate. According to Benoit, "the more underdeveloped countries spend on defense in relation to the size of their economies, the faster they grow [31:1-5]." Saudi Arabian defense spending forecasted to be 20 percent per year has been almost double that (40 percent per year) with the larger portions of the figure attributable to the development of a defense infrastructure.

Whereas U.S. FMS have facilitated Saudi economic development, there are some negative effects of U.S. FMS on the Saudi economic system.

1. U.S. FMS of expensive and highly technical weapon systems are diverting Saudi Arabian resources from other possible uses. This is particularly true in regards to the Saudi Arabian manpower situation. Large numbers of technicians are required full time to perform maintenance and repair of Hawk missile system, F-5 fighter aircraft, army tanks and other vehicles. This effectively reduces Saudi Arabia's supply of skilled manpower for civilian uses.

- 2. U.S. FMS may be diverting Saudi Arabian resources which otherwise would have gone into investment. A decline in investment would result in a lower growth rate in the future with fewer homes and fewer educational and health benefits. Less investment means fewer jobs, less technical and managerial skills acquired and less incentive for institutional investment (15:75-84). Although the decline of Saudi resources appears remote, the possibility of overemphasis of defense requirements is nonetheless real. Donald Wells states that "there is evidence that unspent development allocations in the past have been spent for national defense [54:50]" while Benoit comments that "underdeveloped countries, particularly in the Middle East, have a propensity to overarm so as to affect peace settlements from a position of strength [3:1-52."
- 3. U.S. FMS to Saudi Arabia may bring economic instability, volatile situations and uncompromising attitudes. Abram Chayes of Harvard in discussing principle threats to world peace from Lesser Developed Countries, stated that,
 - . . . millions of people are moving from peasant to tribal villages where some kind of subsistence and the supports of a traditional society are available, to cities both economically and socially unprepared to receive them. Without jobs, homes or food, in city after city the newcomers become a turbulent, uprooted and increasingly desperate mass [52:6].

This is essentially the situation that is emerging in Saudi Arabia where thousands of Bedouin are migrating towards urban centers that have been created either for the support of the oil industry or for necessary, infrastructure construction. Aided by the Westernization of traditional social customs and the breakdown of local craft, U.S. FMS are serving to uproot the traditional Saudi culture and are creating internal instability. Although rhetoric by Saudi Arabian Royalty indicates a willingness to change, there has not been widespread public acceptance or support for such a departure from traditional norms and mores (38:42).

According to Theordore H. Moran of John Hopkins School of Advanced International studies,

. . . arms sold by the U.S. produce a destabilizing effect on recipient societies themselves because of other social and economic programs that must be limited to finance the expenditures on weapons [44:98].

Although Moran felt that Saudi Arabia does not have the revenue constraint normally associated with destabilization, the potential for disruption of the social fabric as a result of military purchases does exist (44:98-104).

Professor Moran's concept of arms sales as a destabilization factor has been supported by a study done by the Saudi Central Planning Office. According to the study, "the major proportion of the rate of inflation (now at 36 percent) in Saudi Arabia is attributable to the U.S. Army Corps of Engineers military construction program [44:103-104]." Additionally, Professor Moran is supported by Ali Hassan Aliyami, who in The Impact of Modernization

on the Stability of the Saudi Monarchy, has held that military modernization is potentially destabilizing by causing Saudi expectations to rise relatively more than can be fulfilled by actual achievement. This gap between expectations and actual achievements is perceived as a state of relative deprivation by the Saudi people which leads to discontent and political instability.

Senator Frank Church of Idaho has contended that arms sales radicalizes the politics of Saudi Arabia. The United States normally likes to think of Saudi Arabia as stable and anti-Communist and thereby has acquiesced to demands for enormous arms purchases. However, as Church points out, the fastest way you can radicalize the politics of an underdeveloped country is through a very large military buildup, through the development of a military elite that becomes dissatisfied with the old political order and then turns its weapons upon the civilian government (44:108).

Summary

Chapter VI has shown that United States policy on arms sales is focused upon ten purposes and twenty-two considerations, and that each purpose and consideration is investigated for advantages and disadvantages prior to a sale. Specifically in the case of Saudi Arabia, three considerations of U.S. arms sales policy have emerged that

are of particular importance. These considerations are:

(1) the effect of US arms sales to Saudi Arabia on the regional balance of power, (2) the effect of U.S. arms sales on the Saudi military and the ability of those arms to promote self-sufficiency in defense, and (3) the effect of arms sales on the Saudi economy.

Further, it has been demonstrated that the purpose and effects of U.S. arms sales to Saudi Arabia overlap considerably into the economic, political and social considerations of U.S. foreign policy, and are beset by a diversity of opinion by elected leaders, scholars and military experts. As a result no clear, simple purpose for U.S. arms sales to Saudi Arabia can be given and no simple effects can be ascertained. U.S. foreign military sales appear to be a mixture of advantages and disadvantages which must be continually investigated and evaluated.

CHAPTER VII

CONCLUSIONS AND ASSESSMENT

Conclusions

The investigation of U.S. foreign military sales to Saudi Arabia reveals that the U.S. foreign military sales program is a special tool of U.S. foreign policy and only one facet of a broad based and complex political, military, economic, and strategic relationship between the United States and Saudi Arabia.

However, the research also revealed that the relative scope of U.S. foreign military sales in general and arms transfers to Saudi Arabia in particular are beset by a diversity of opinion. Some feel that U.S. foreign military sales to Saudi Arabia merely reflect U.S. foreign military sales worldwide in that it consumes scarce human and economic resources. Others see U.S. foreign military sales to Saudi Arabia as a regionally bound short-term phenomenon that will subside in the near future. Some believe that arms sales to Saudi Arabia, particularly at the current high levels, intensify the potential for and level of hostilities and diminish interest in peaceful resolution of Middle East and Persian Gulf conflicts. Others are concerned that the volume and content of U.S.

transfers to Saudi Arabia create a larger Saudi appetite for weapons. Others believe that U.S. arms exports to Saudi are being driven by the competitive policies of other major suppliers. Some believe the greatest difficulty in investigating arms transfers to Saudi Arabia is the lack of clarity about the content of what is generally termed "arms transfers" and that categorization and explanation of the numbers of arms will permit a more precise focus on the real problems. Still others believe that arms sales reflect the larger need for the United States to pursue political settlement of Saudi Arabian disputes.

The study has encountered this diversity of opinion in investigating U.S. foreign military sales to Saudi Arabia and generally it has found that:

- 1. U.S. foreign military sales to Saudi Arabia respond to the legitimate security needs of Saudi Arabia and tend to have a deterrent effect in the Arab-Israeli conflict, the Persian Gulf conflict and Arabian peninsula conflicts.
- 2. U.S. foreign military sales to Saudi Arabia contribute to peace in the Middle East.

Specifically in regards to the stated purposes of U.S. arms transfers U.S. foreign military sales to Saudi Arabia respond principally to: (1) helping maintain regional balances important to the United States in order to avert war or political shifts away from us, (2) promote

self-sufficiency in deterrence and defense as a stabilizing factor in itself and as a means of reducing the level and automaticity of possible American involvement, and (3) limit Soviet influence and maintain the balance in conventional arms.

Within the framework of these three purposes, the United States principally applies the following military, political and economic considerations to arms sales to Saudi Arabia:

1. The nature of the threat to Saudi Arabia and the effect the arms have on the military balance of power, regional military tensions and the military buildup plans of Saudi Arabia.

It is the authors' judgment that U.S. foreign military sales support Saudi Arabia in resisting the growing Soviet influence in the Persian Gulf-Arabian peninsula. With the exception of Israel, Iran and Saudi Arabia, the Soviet Union was exercising considerable influence in every Middle East country through military aid and a liberal arms sales policy.

In the Persian Gulf, U.S. foreign military sales to Saudi Arabia are a stabilizing factor providing the Saudis with the military power to somewhat offset the growing military capabilities of Iran and the ability to negotiate Arabian peninsula-Persian Gulf differences from a militarily equal position without fear of reprisal.

Although some unreconcileable differences exist between Iran, Iraq, and Saudi Arabia, the growing military power of Saudi Arabia, fueled by U.S. foreign military sales, is driving settlement of differences towards the negotiating table rather than the battlefield.

U.S. foreign military sales gives Saudi Arabia the capacity for the first time, to defend itself as a sovereign state against military adventurism by Yemen and Iraq, particularly along its relatively undefined border areas. Saudi Arabia is now able to defend its interests both within its sovereign territory and its territorial waters.

It is also the authors' opinion that U.S. FMS has provided Saudi Arabia the military capability to defend her oil interests. Military action by any of Saudi Arabia's neighboring states against Saudi oil can now be discouraged and repelled if necessary by a Saudi armed forces that consists of a highly respectable and sophisticated air defense system, a quick responding and highly lethal air force, and a mobile, flexible army capable of wielding both offensive and defensive power. Additionally, the emerging Saudi Navy will, in the near future, be capable of discouraging foreign military intervention of Saudi oil supplies both in the seas and in the straits of Hormuz, Teran and Bab el Mandeb.

- U.S. foreign military sales are preserving the balance of power in the Arabian peninsula. Although the potential exists that U.S. foreign military sales will cause a military imbalance of power and a destabilizing influence in the Arab-Israeli conflict, this situation has not occurred. The great transfers of Saudi Arabian arms to "confrontation states" espoused by King Khalid and Prince Sultan and feared by the Israelis have not occurred. Indications are that Saudi rhetoric is somewhat inconsistent with Saudi arms transfer policy, while Israeli reaction and concern to the possibility of increased Saudi arms transfer capability has been exaggerated.
- 2. The nature of Saudi Arabian economic development plans and the effect U.S. arms have on the implementation and achievement of the economic goals.

It is the authors' judgment that although U.S. foreign military sales are creating social turmoil through modernization and westernization of traditional cultural values, the whole effect of U.S. foreign military sales to Saudi Arabia is positive. First, U.S. foreign military sales directly contribute to the Saudi civilian economy providing for the impact of production and management skills. Second, U.S. FMS supply essential infrastructure capable of supporting economic and military goals and objectives. Third, U.S. FMS reduces the burden on the Saudi civilian economy to provide goods and services

thereby permitting other Saudi investments. Fourth, U.S. FMS support a fuller use of Saudi resources, a modernization of attitudes and an acculturation of management and technical ideas. Fifth, by developing the Saudi military, U.S. FMS serve as a catalyst for social change creating greater national unity and identification by incorporation of diverse ethnic groups and thereby creating a social perspective compatible with economic development. Sixth, and last, U.S. FMS create greater national identification by supporting the symbolic value of the Saudi armed forces for the Saudi population as a whole.

Net Assessment

Overall, it is the judgment of this study that considering the internal political, social and economic climate of Saudi Arabia and the external situations surrounding Saudi Arabia, that the U.S. is justified in selling arms to Saudi Arabia. Further, the magnitude and nature of U.S. arms are not inconsistent with the overall economic, political and military development of Saudi Arabia. U.S. FMS are purposeful, and well fitted to the needs of Saudi Arabia and maintain the balance of power in the Middle East.

SELECTED BIBLIOGRAPHY

A. REFERENCES CITED

- 1. Ali, Sheikh Rustum. <u>Saudi Arabia and Oil Diplomacy</u>. New York: Praeger Publishers, 1976.
- Beaumont, Lieutenant Colonel Charles D., USAF, and others. "Role of Security Assistance in the Arab-Israeli Conflict." Unpublished research report, unnumbered, U.S. Army War College, Carlisle Barracks, PA, 1975.
- 3. Benoit, Emile. Defense and Economic Growth in Developing Countries. Lexington, Mass.: D. C. Heath and Company, 1968.
- Berman, Bob, and others, eds. "U.S. Arms to the Persian Gulf: \$10 Billion Since 1973," <u>The Defense Monitor</u>, Vol. 4, No. 3. Washington: Center for Defense Information, May, 1975.
- 5. Brewer, William D. "Yesterday and Tomorrow in the Persian Gulf," Middle East Journal, Vol. 23, No. 2 (1969), pp. 149-158.
- Cecil, Charles O. Country Officer for Saudi Arabia, Department of State, Washington, D.C. Telephone interview. 6 January 1977.
- 7. Chayes, Abram. "Nuclear Arms Control after the Cold War," Journal of American Academy of Arts and Sciences, Summer, 1975.
- Donahue, Thomas G. "Outlook for the Persian Gulf, 1971-1976." Unpublished research report, unnumbered, Army War College, Carlisle Barracks, Pennsylvania, 1971.
- Doolittle, Robert. Manager, Air Force Logistics Command/Directorate of International Logistics.
 Wright-Patterson AFB, Ohio. Personal interviews conducted intermittently from 5 December 1976 to 15 February 1977.

- 10. Drury, Captain Harry T., III, USAF, and Captain Peter J. Glenboski, Jr., USAF. "Peace Hawk: A Case Study of a Foreign Military Sales Program and Its Management." Unpublished master's thesis, LSSR 17-77A, AFIT/LS, Wright-Patterson AFB, OH, 1977.
- 11. Dupuy, Colonel Trevor N., U.S. Army, Retired, Grace P. Haynes, and Colonel John A. C. Andrews, USAF, Retired. "The Almanac of World Military Power." 3d ed. Dunn Loring, Virginia: T. N. Dupuy Associates, 1974.
- 12. Erion, Major Gerald L., USAF, and Major John L. Harter, USAF. "United States Foreign Military Sales to Iran: Major Advantages and Disadvantages to Both Countries." Unpublished master's thesis, SLSR 25-75B, AFIT/SL, Wright-Patterson AFB, OH, 1975.
- 13. "Foreign Military Sales--A Growing Concern," Comptroller General's Report to the Congress. Washington: U.S. Government Accounting Office, B-165731, June, 1976.
- 14. Gilbert, Stephen P., and others. "U.S. Security Interests in the Persian Gulf." Unpublished research report, unnumbered, Strategic Studies Center, Stanford Research Institute, Menlo Park, California, 1973.
- 15. Janowitz, Morris. The Military in the Political <u>Development of New Nations</u>. Chicago: The University of Chicago Press, 1963.
- 16. Knauerhase, Ramon. The Saudi Arabia Economy. New York: Praeger Publishers, 1975.
- 17. Leahy, Captain James T., USAF, and Captain Haskell I. Lynne, Jr., Captain, USAF. "Project Peace Hawk--A Case Study in the Management of a Foreign Military Sale." Unpublished master's thesis, SLSR 38-74B, AFIT/SL, Wright-Patterson AFB, OH, 1974.
- 18. Long, David E. The Persian Gulf. Boulder, Colorado: Westview Press, 1976.
- 19. Loosbrock, John F., and others, ed. "The Military Balance 1976/77: The Middle East and the Mediterranean; Saudi Arabia," Air Force Magazine, December, 1976.

- 20. Metcalf, John E. Saudi Arabia; A New Economy Survey, by First National City Bank. First National City Bank, 1974.
- 21. Nakhleh, Emile A. <u>Arab-American Relations in the Persian Gulf.</u> Washington: American Enterprise Institute, 1975.
- 22. The United States and Saudi Arabia--A
 Policy Analysis. Washington: American Enterprise
 Institute, 1975.
- 23. Norton, Dr. Leslie N. Professor of Logistics Management, School of Systems and Logistics, AFIT/SL, Wright-Patterson AFB, Ohio. Personal interviews conducted intermittently from 4 January 1977 to 23 February 1977.
- 24. Nyrop, Richard F., and others. Area Handbook for Saudi Arabia. Washington: Government Printing Office, 1977.
- 25. "Presidential Campaign Debate of October 6, 1976."

 Weekly Compilation of Presidential Documents, Vol.

 12, No. 41 (1976). Washington: Government Printing Office.
- 26. Schlesinger, James E. "Strengthening Military Balance in Critical World Areas," <u>Commanders Digest</u>, Vol. 16, No. 4 (July 23, 1974).
- 27. Seifert, Walter. AF Manager of Foreign Military Sales to Saudi Arabia, AFALD/MINS, Wright-Patterson AFB, Ohio. Personal interview. 4 January 1977.
- 28. Smith, Colonel James D., USA. "Saudi Arabian National Guard Modernization Through U.S. Army Project Management." Unpublished research report, unnumbered, Army War College, Carlisle Barracks, Pennsylvania, 1975.
- 29. Tahtinen, Dale R. "Arms in the Persian Gulf."
 Washington Enterprise Institute for Public Policy
 Research, 1974.
- 30. Tahtinen, Dale R., and John Lenczowski. "Arms in the Indian Ocean: Interests and Challenges." Washington: American Enterprise Institute for Public Policy Research, 1977.

- 31. Tucker, Lieutenant Colonel David L., USAF. "The Problem of a Military Advisor in a Foreign Culture." Unpublished research report number 6088, Air War College, Maxwell AFB, Alabama, 1976. AD B011369.
- 32. Tucker, Robert W. "Oil: The Issue of American Intervention," Commentary, 23 January 1975. Washington Post, 5 January 1975.
- 33. U.S. Arms Control and Disarmament Agency. World Military Expenditures and Arms Transfer 1966-1975.
 Washington: Government Printing Office, 1976.
- 34. U.S. Central Intelligence Agency. Atlas: Issues in the Middle East. Washington: Government Printing Office, 1973.
- 35. U.S. Congress. House of Representatives. Committee on Foreign Affairs. New Perspectives on the Persian Gulf. Hearings, 93rd Congress, 1st Session, 1973. Washington: Government Printing Office, 1973.
- 36.

 Committee on International Relations.

 Hearings on Proposed Sale of Maverick Missiles
 to Saudi Arabia--Statement by the Honorable Alfred
 L. Atherton, Jr., Assistant Secretary of State.
 Hearings, 94th Congress, 2nd Session, 1976.
 Washington: Government Printing Office, 1976.
- Hearings on Military Sales to Saudi Arabia.

 Hearings, 94th Congress, 1st Session, 1975.

 Washington: Government Printing Office, 1976.
- 38.

 . Hearings on Proposed Foreign Military Sales
 to Middle Eastern Countries--1976. Hearings,
 94th Congress, 2nd Session, 1976. Washington:
 Government Printing Office, 1976.
- 39. Subcommittee of the Committee of Appropriation. Foreign Assistance and Related Agencies
 Appropriation for 1978 Part 3. Hearings, 95th
 Congress, 1st Session, 1977. Washington: Government Printing Office, 1977.
- 40. The Persian Gulf, 1975: The Continuing

 Debate on Arms Sales. Hearings, 94th Congress,

 1st Session, 1975. Washington: Government Printing Office, 1975.

- 41. United States Arms Sales to the Persian

 Gulf. Report. 94th Congress, 1st Session, Washington: Government Printing Office, 1975.
- 42. International Security Assistance and Arms
 Export Control Act of 1976. Public Law 94-329,
 94th Congress. Washington: Government Printing
 Office, 1976.
- 43. U.S. Congress. United States Senate. Committee on Foreign Relations. Foreign Assistance Authorization--Arms Sales Issues. Hearings, 94th Congress, 1st Session, 1975. Washington: Government Printing Office, 1976.
- 44. U.S. Arms Sales Policy. Hearings, 94th
 Congress, 2nd Session, 1976. Washington: Government Printing Office, 1977.
- 45. U.S. Defense Security Assistance Agency. Military
 Assistance and Sales Manual. DOD Manual 5105.38-M.
 Washington: Government Printing Office, 1974.
- 46. Foreign Military Sales and Military Assistance Facts. Washington: Government Printing Office, 1975.
- 47. U.S. Department of the Air Force. Foreign Military
 Sales. AF Manual 400-3. Washington: Government
 Printing Office, 1974.
- Assistance, Federal Aid, and Foreign Military
 Sales. MAP Handbook. Washington: Government
 Printing Office, 1970.
- 49. U.S. Department of State. "Department Reviews U.S. Relations with the Countries of the Arabian Peninsula-Persian Gulf Region." Washington: Government Printing Office, September, 1974.
- 50. "Persian Gulf/Arabian Peninsula." Current
 Policy. Washington: Government Printing Office,
 June, 1975.
- 51. "Saudi Arabia and the U.S.: Areas of Common Interest." News Release. Washington: Government Printing Office, February 23, 1976.

- 52. U.S. President, 1977 (Carter). Report to Congress on Arms Transfer Policy Pursuant to Section 202(b) and 218 of the International Security Assistance and Arms Export Control Act of 1976, draft copy.

 [Washington: Government Printing Office, 30 June 1977].
- 53. Walpole, Norman C., and others. <u>Area Handbook for Saudi Arabia</u>. Washington: Government Printing Office, 1971.
- 54. Wells, Donald A. <u>Saudi Arabian Development Strategy</u>. Washington: American Enterprise Institute, 1976.
- 55. Winn, Squadron Leader Linton T., RAAF, and Captain James L. Dunlap, USAF. "Foreign Military Sales Legislation: Impact on the Achievement of United States Foreign Policy Objectives and its Implications for the Department of Defense." Unpublished master's thesis, SLSR 17-75B, AFIT/SL, Wright-Patterson AFB, OH, 1975. AD A016390.

B. RELATED SOURCES

- Adie, W. A. C. Oil Politics and Seapower: The Indian Ocean Vortex. New York: National Strategy Information Center, Crane, Russak and Company, 1975.
- Anthony, John Duke. The Middle East: Oil, Politics, and Development. Washington: American Enterprise Institute, 1975.
- Bradshaw, Captain Edward P., USAF. "The Evolution of Foreign Military Sales." Unpublished research report, unnumbered, AFIT/SL, Wright-Patterson AFB, Ohio, 1976.
- Brodkey, R. M., and James Horgen. "Americans in the Gulf: Estimates and Projections of the Influx of American Nationals into the Persian Gulf, 1975-1970." Unpublished research report, unnumbered, The Middle East Center, American Institutes for Research, Washington, D.C., 1975.
- Chaloult, Major Michael P., USAF, Major James H. Kroenlein, USAF, and Major Phillip H. Ferro, USAF. "Guidance for Foreign Military Sales." Unpublished research report, unnumbered, Air Command and Staff College, Maxwell AFB, Alabama, 1976. AD B011369.

- Congressional Quarterly Almanac, Vol. XXXI (94th Congress, 1st Session), 1975.
- Crosby, Major F. Cregg, USAF. "An Analysis of United States Foreign Policy in the Middle East." Unpublished research report, unnumbered, Air Command and Staff College, Maxwell AFB, Alabama, 1974.
- Cunningham, Major Charles E., Jr., USAF. "Foreign Military Sales as a Political Instrument of United States Foreign Policy: Middle East." Unpublished research report, unnumbered, Air Command and Staff College, Maxwell AFB, Alabama, 1975.
- Fish, Lieutenant General Howard, USAF. "FMS--No More Giving it Away," Government Executive, December, 1976, pp. 19-22.
- Hull, Lee B. "The Impact of the Arab Decision Makers on the Oil Market." Unpublished master's thesis, Naval Postgraduate School, Monterey, California, 1976. AD A026375.
- "Investment Guarantees," <u>U.S. Treaties and Other International Agreements</u>, Vol. 26, Part 1. Washington: Government Printing Office, 1975.
- Lenczowski, George. Middle East Oil in a Revolutionary
 Age. Washington: American Enterprise Institute, 1976.
- Morin, Major Carl R., Jr., USA. "An Analysis of U.S. Security Assistance in the Middle East." Unpublished research report, unnumbered, Air Command and Staff College, Maxwell AFB, Alabama, 1976.
- Quandt, William B. "Domestic Influences on U.S. Foreign Policy in the Middle East, The View from Washington." Unpublished research report, unnumbered, Rand Corporation, Santa Monica, California, 1969.
- Ray, William D. "Tradition and Modernization in Saudi Arabia." Unpublished research report, number 2220-74, Air Command and Staff College, Maxwell Air Force Base, Alabama, 1974.
- Stephens, Robert. The Arabs New Frontier. Boulder, Colorado: Westview Press, 1976.